Tab #	Description	Reference
	e Expense	
1	Finance Expense and Interest Allocated to Construction	PUB/MH I-26 (a-c)
2	Weighted Average Interest Rate Interest Rates	PUB/MH I-75 (c); PUB/MH II-88 (a-d)
3	Growth in Debt Levels Financial Information	PUB/MH I-9; Appendix 11.11, MFR 5
4	Credit Rating of Province of Manitoba & Manitoba Hydro	PUB/MH I-6 (a-c); PUB/MH II-72 (a-d)
5	Finance Expense - Debt Continuity	Appendix 11.39, MFR 5
6	Finance Expense - Debt Maturities Debt Borrowings and Maturities Weighted Debt Portfolio	Appendix 11.41, MFR 7; COALITION/MH I-109 (a-g) Appendix 11.42, MFR 8
7	Proportion of Short-Term & Long- Term Debt	COALITION/MH I-107 (a), (c) & (g)
8	Debt Issues	Appendix 11.40, MFR 6
Payme	nts to Government	
9	Payments to the Province and Municipalities	Appendix 11.32, MFR 1
10	Net Manitoba Hydro Provincial Debt Guarantee Fee (PGF)	Appendix 11.33, MFR 2
11	Water Rentals	Appendix 11.34, MFR 3
First N	ations Partnership	
12	WPLP IFF14 Average Unit Revenue/Cost	Appendix 11.6, MFR 8, pp. 2-3; Appendix 11.15, MFR 9, p. 5; Appendix 11.19, MFR 1, pp. 3-4
13	WPLP Revenue Arrangement Existing & New Impact on Revenue Requirement	Coalition/MH I-27c PUB/MH I-11 d & e PUB/MH I-11d (Revised) Coalition/MH I-27e

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Tab #	Description	Reference
14	KHLP IFF14	Appendix 11.6, MFR 8, pp. 8-9;
	Average Unit Revenue/Cost	Appendix 11.15, MFR 9, p. 4;
		Appendix 11.19, MFR 1, pp. 3-4
	KCN Preferred Distributions	
		Coalition /MH a,f,g
15	Overall Financial Impact of WPLP & KHLP	Appendix 11.15, MFR 9, p.P. 4-6;
		Appendix 11.6, MFR 8, pp. 2-3 Appendix 11.6, MFR 8, pp. 8-9
16	Mitigation Costs	PUB/MH I-65 a,b,e
		PUB/MH I-10 (b) - 2012 GRA
		PUB/MH I-24 (d)
		PUB/MH I-20 (b) & (f)
17	Detail of Capital Costs- Mitigation	PUB/MH I-17 (b)
18	FN Accounts - Arrears	MKO/MH I-1a-g Attachment 1
		pp.12-13
A 14		MKO/MH I-3 Attachment 1
	tive Rate Increases	
19	Rate Increase Alternative Scenarios – 10 Year Impact	PUB/MH I-7 (a-d)
20	Rate Increase Alternative Scenarios – 20 Year Impact	PUB/MH II-1 (a-c)
21	Impact of DSM on IFF	PUB/MH I-59 (a-b)
22	Alternative Rate Increase and Impact	PUB/MH II-48 (a-b)
	on Forecast Deficits	PUB/MH II-2

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Section:	Tab 5: Section 5.6 Figure 5.8 Appendix 11.38							
Topic:	Financial Results and Forecasts							
Subtopic:	Finance Expense	Finance Expense						
Issue:	Finance Expense and Interest Alloca	ted to Construction	l					

PREAMBLE TO IR (IF ANY):

QUESTION:

- a) Please recast Figure 5.8 to include the provincial debt guarantee fee and extend the graph to 2034.
- b) Please confirm Figure 5.8 represents the information in Appendix 11.38. If not please file the data underlying Figure 5.8.
- c) Please include on Figure 5.8 the comparative plot of finance expense based on IFF13.

RATIONALE FOR QUESTION:

To understand the changes in detail of finance expense from the last forecast.

RESPONSE:

a) Numerical values supporting the finance expense information depicted in Figure 5.8 were filed in Appendix 11.38 with the exception of the data for the fiscal year 2008/09. A revised table from Appendix 11.38 is supplied in this response to provide for completeness of data.

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2015
03 MANITOBA HYDRO
Summary of Total Finance Expense IFF14
(\$ millions CAD)

	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Interest on Short & Long Term Debt													
Gross Interest	\$ 469 \$	472 \$	472 \$	490 \$	515 \$	528	\$ 554	\$ 627	\$ 756	\$ 903	\$ 995	1,076	1,120
Provincial Guarantee Fee	70	72	77	82	90	96	105	118	140	167	197	213	225
Amortization of (Premiums), Discounts, and Transaction Costs	(12)	(11)	3	0	0	2	3	3	2	2	2	2	3
Intercompany Interest Receivable	(18)	(16)	(16)	(17)	(19)	(19)	(21)	(23)	(27)	(32)	(37)	(42)	(45)
Total Interest on Short & Long Term Debt	509	517	535	555	587	608	640	725	871	1,040	1,157	1,248	1,303
Interest Allocated to Construction	(74)	(98)	(136)	(167)	(138)	(140)	(146)	(207)	(316)	(437)	(388)	(341)	<mark>(112</mark>)
Interest Earned on Sinking Fund	(25)	(24)	(17)	(10)	(10)	(24)	(0)	(2)	(9)	(19)	(24)	(24)	(21)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	(11)	6	(17)	. ,	(10)	(19)	(11)	(17)	(11)	(15)	, ,	` ,	(10)
	. ,			(0)	2	(19)	(11)	(17)	(11)	(15)	(6)	(9)	(10)
Revaluation of Dual Currency Bonds	32	(31)	4	3	3	2	1	1	1	1	1	1	1
Corporate Allocation	(18)	(18)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)
Other Amortization	 20	20	20	24	27	28	29	29	29	29	30	30	50
Total Finance Expense	\$ 433 \$	373 \$	388 \$	385 \$	452 \$	435	\$ 495	\$ 510	\$ 548	\$ 581	\$ 752 \$	887 \$	1,194

				. 0.00001		. 0.0000		. 0.00000			. 0.00001	2000	. 0.00001	
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Interest on Short & Long Term Debt														
Gross Interest	\$	1,137	1,125	\$ 1,141	\$ 1,149	1,154	\$ 1,163	\$ 1,168	\$ 1,171	\$ 1,161	\$ 1,143	\$ 1,067	\$ 1,050 \$	1,032
Provincial Guarantee Fee		232	231	233	236	236	238	239	240	241	239	232	232	232
Amortization of (Premiums), Discounts, and Transaction Costs		4	3	1	2	2	2	2	3	3	3	4	4	4
Intercompany Interest Receivable		(34)	(26)	(28)	(29)	(30)	(32)	(33)	(34)	(36)	(37)	(39)	(39)	(40
Total Interest on Short & Long Term Debt		1,338	1,333	1,347	1,358	1,362	1,371	1,376	1,379	1,368	1,349	1,264	1,247	1,228
Interest Allocated to Construction		(12)	(14)	(17)	(20)	(24)	(25)	(17)	(20)	(20)	(24)	(25)	(27)	(38
Interest Earned on Sinking Fund		(19)	(7)	(9)	(13)	(16)	(30)	(44)	(59)	(69)	(82)	(62)	(76)	(91
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges		(12)	(7)	-	-	-	-	-	-	-	-	-	-	-
Revaluation of Dual Currency Bonds		2	2	2	2	2	-	-	-	-	-	-	-	-
Corporate Allocation		(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(17)	(16)	(16)	(16)	(16
Other Amortization	_	47	46	44	43	42	41	40	39	38	37	36	34	33
Total Finance Expense	\$	1.326	1.334	\$ 1.349	\$ 1.351	1.348	\$ 1.338	\$ 1.337	\$ 1.321	\$ 1.301	\$ 1.263	\$ 1.197	\$ 1.161 \$	1.116

Forecast For

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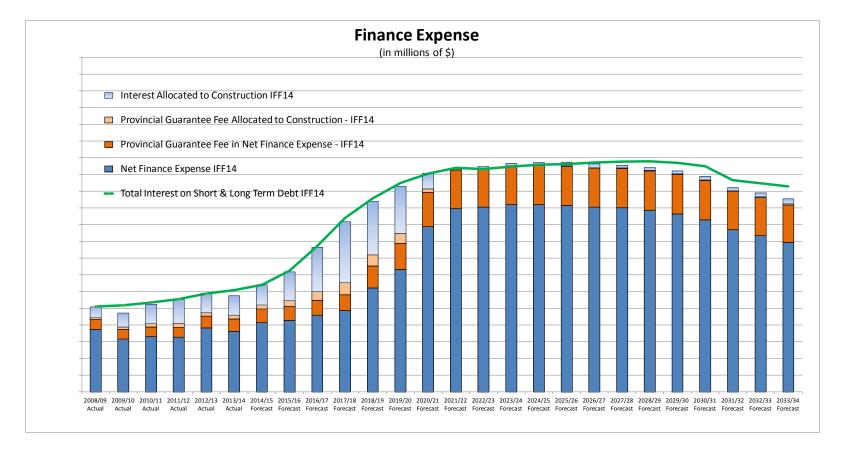


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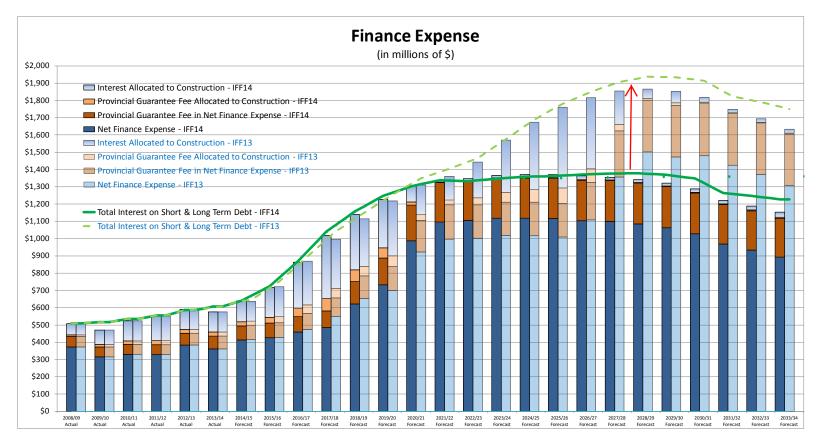
b) On the following page, the original Figure 5.8 in Tab 5 has been extended to 2033/34 and has been recast to separately identify the provincial debt guarantee fee. In the original Figure 5.8, a portion of the provincial debt guarantee fee would have been included within the total interest allocated to construction, with the residual amount of provincial debt guarantee fee included in net finance expense.

The proportion of interest allocated to construction divided by gross interest for any fiscal year was used to calculate the amount of provincial debt guarantee fee allocated to construction for that fiscal year, with the residual amount of provincial debt guarantee fee included in net finance expense.

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C on IFF13. The second graph in this response adds a comparative plot of finance expense based



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Section:	Tab 5: Section 3:	Page No.:	Section 5 P. 23
	Appendix 3.2		Appendix 3.2 pg 4.
Topic:	Finance Expense		
Subtopic:	Interest Rate Forecast		
Issue:	Weighted Average Interest Rate		

PREAMBLE TO IR (IF ANY):

QUESTION:

Please file an update to the short term and long term interest rate forecast based on January bank forecasts and provide a comparison between the current forecast interest rates and that included in the application.

RATIONALE FOR QUESTION:

RESPONSE:

Table 1 on the following page summarizes the forecast of Manitoba Hydro Canadian short-term interest rates for the 2014/15 - 2033/34 period based on an update of end of January 2015 source forecasts, and provides a comparison to those rates included in the Application. The source forecasts are also provided with this response.

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Table 1: Manitoba Hydro Canadian Short-term Rate - %

	January 201	15 Update		IFF 2014 – (1	Fall 2014 Up	date)
	Canada 3- Month T-Bill	Guarantee Fee	MH Cdn Short Term Rate	Canada 3- Month T-Bill	Guarantee Fee	MH Cdn Short Term Rate
2014/15	0.85%	1.00%	1.85%	0.95%	1.00%	1.95%
2015/16	0.50%	1.00%	1.50%	1.30%	1.00%	2.30%
2016/17	0.95%	1.00%	1.95%	2.40%	1.00%	3.40%
2017/18	2.30%	1.00%	3.30%	3.10%	1.00%	4.10%
2018/19	2.95%	1.00%	3.95%	3.45%	1.00%	4.45%
2019/20	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2020/21	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2021/22	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2022/23	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2023/24	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2024/25	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2025/26	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2026/27	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2027/28	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2028/29	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2029/30	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2030/31	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2031/32	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2032/33	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%
2033/34	3.50%	1.00%	4.50%	3.90%	1.00%	4.90%

Table 2 on the following page summarizes the forecast of Manitoba Hydro Canadian long-term interest rates for the 2014/15 - 2033/34 period based on an update of end of January 2015 source forecasts, and provides a comparison to those rates included in the application.

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Table 2: Manitoba Hydro Canadian Long-term Rate - %

	January 2	015 Updat	te		IFF 2014 – (Fall 2014 Update)							
	Canada	Spread	Guarantee	MH Cdn	Canada	Spread	Guarantee	MH				
	10 Yr+		Fee	Long Term	10 Yr+		Fee	Cdn				
	Bond			Rate	Bond			Long				
	Yield				Yield			Term				
								Rate				
2014/15	2.30%	0.90%	1.00%	4.20%	2.60%	0.90%	1.00%	4.50%				
2015/16	2.15%	0.85%	1.00%	4.00%	3.30%	0.80%	1.00%	5.10%				
2016/17	2.80%	0.75%	1.00%	4.55%	3.75%	0.75%	1.00%	5.50%				
2017/18	3.90%	0.75%	1.00%	5.70%	4.05%	0.75%	1.00%	5.80%				
2018/19	3.95%	0.75%	1.00%	5.75%	4.25%	0.75%	1.00%	6.00%				
2019/20	3.95%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2020/21	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2021/22	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2022/23	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2023/24	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2024/25	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2025/26	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2026/27	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2027/28	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2028/29	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2029/30	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2030/31	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2031/32	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2032/33	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				
2033/34	4.00%	0.75%	1.00%	5.75%	4.45%	0.75%	1.00%	6.20%				

Note 1: Values in the above table may not add up due to rounding.

As compared to the Canadian interest rate forecasts used in the application which reflected the consensus outlook as of September 2014, forecasts for Manitoba Hydro's short-term and long-term interest rates are projected to be lower for every year of the January updated forecast. The January updated forecast includes sources that had prepared a forecast post the January 21, 2015 announcement from the Bank of Canada to drop the overnight rate from 1.0% to 0.75%.

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Section:	11	Page No.:	PUB/MH I-10b, PUB/MH I-75c, Appendix 11.19 11.38
Topic:	Minimum Filing Requirements		
Subtopic:	Finance Expense		
Issue:	Interest Rates		

PREAMBLE TO IR (IF ANY):

MH has indicated that Interest rates have declined from the levels forecast by MH in IFF14 as follows:

Fiscal	N	Ianitoba Hydi	ro	Manitoba Hydro						
Year	Canad	ian Short-teri	m Rate	Canadian Long-term Rate						
	January	Application	Basis	January	Application	Basis				
	2015	Fall 2014	Point	2015	Fall 2014	Point				
	Update	Update	Change	Update	Update	Change				
2014/15	1.85%	1.95%	(10)	4.20%	4.50%	(30)				
2015/16	1.50%	2.30%	(80)	4.00%	5.10%	(110)				
2016/17	1.95%	3.40%	(145)	4.55%	5.50%	(95)				
2017/18	3.30%	4.10%	(80)	5.70%	5.80%	(10)				
2018/19	3.95%	4.45%	(50)	5.75%	6.00%	(25)				
2019/20 - 2033/34	4.50%	4.90%	(40)	5.75%	6.20%	(45)				

Source: PUB/MH I-75c

MH has provide an alternative IFF14, in PUB/MH I-10b Appendix B based on a January 2015 update which reflects a reduction in finance expense of about \$1.5 billion.

QUESTION:

a) Please provide the weighted average cost of borrowing based on the January 2015 Update and compare that with what was used in IFF14.

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- b) Provide an updated detail of finance expense similar to Appendix 11.38 based on the January 2015 update consistent with finance expense found in PUB/MH I-10a and PUB/MH I-10b
- c) Please provide details of any new debt issues for 2014/15 and forecast for 2015/16 with the respective forecast interest rate and comment on any changes from that included in the application.
- d) Please indicate the impact of the lower interest rates on the amount of capitalized interest and refile PUB/MH I-9 based on this updated view.

RATIONALE FOR QUESTION:

To understand the implications of changes in interest rates on MH's forecast finance expense.

RESPONSE:

Response to part a)

Please see the following chart which provides the weighted average interest rate (cost of borrowing) to 2033/34 for the IFF14 used in the Application, as well as for the IFF14 scenarios with the January 2015 updated interest rates and with the January 2015 updated interest rates and estimated export revenues (as filed in response to PUB/MH-I-10b). In order to provide comparability to IFF14, which had an October 31, 2014 cutoff date for the inclusion of actual debt issuance, the scenarios in this chart include actual long term debt issuance to October 31, 2014 and forecast issuance thereafter.

The weighted average interest rate (WAIR) declines under both scenarios by an average of approximately 30 basis points. The scenario with updated export revenues yields the lowest WAIR as the lower export revenues in this scenario lead to higher levels of borrowing which, when issued at the low interest rates, would contribute to a lower overall weighted average cost of borrowing. The decrease in the forecast interest rates, in combination with the forecast assumption of a 20 year term to maturity, shows the impact that fixing these beneficially low interest rates could have for current and future ratepayers over the 20 year timeframe.

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Weighted Average Interest Rate (%) (For the Fiscal Year Ended March 31) 8.00 --- Actual and IFF14 Forecast (blue) --- IFF14 Scenario Updated for Interest Rates (red) 7.50 -X · IFF14 Scenario Updated for Interest Rates and Export Revenues (green) 7.00 6.50 6.00 5.50 5.00 2006-07 2007/08 2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24 2024-25 2025-26 2026-27 2027-28 2028-29 2029-30 2030-31 2031-32 2032-33 2033-34 Actual Ac

Response to part b)

Please see the following finance expense schedules to this information request (in a format consistent with the IFF14 finance expense information shown in Appendix 11.38):

- <u>Attachment 1</u>: Summary of Total Finance Expense with the IFF14 January 2015 Interest Rate Update
- <u>Attachment 2</u>: Summary of Total Finance Expense with the IFF14 January 2015 Interest Rate and Export Revenue Update
- <u>Attachment 3</u>: Total Finance Expense Variance between the IFF14 January 2015 Interest Rate Update, and IFF14
- <u>Attachment 4</u>: Total Finance Expense Variance between the IFF14 January 2015 Interest Rate and Export Revenue Update, and IFF14

As seen in Attachment 4, over the 20 year period there is a reduction to total net finance expense of approximately \$1.5 billion due to the combination of lower forecast interest rates and export revenues. Attachment 4 also demonstrates the counterbalances which occur within finance expense. In this scenario, although gross interest and PGF decrease, there are also counterbalancing offsets arising from a reduction in the capitalized interest rate (which reduces the credited amount of interest allocated to construction) and the reduction in the interest earned rate (which reduces interest earned on sinking fund and intercompany interest receivable). See PUB/MH I-10b Attachment B for the full revenue requirement impact.

Response to part c)

Manitoba Hydro's long term debt financings secured in 2015 have taken advantage of the sharp reduction in all-in yield rates for the benefit of current and future ratepayers.

On January 14, 2015, Manitoba Hydro secured long term debt series **FR-3** for CAD \$175 million and a March 5, 2041 maturity date. FR-3 was issued at a premium with proceeds of \$202.2 million (net of commissions), a fixed rate coupon of 4.100%, and an all-in yield of 3.215%. The debt was issued to finance new borrowing requirements. Debt series FR-3 was issued in response to investors that had specifically requested a reopening of the Manitoba 2041 bond. At the time of issuance, with an all-in yield of 3.215% (excluding 1% PGF), FR-3 was the second lowest fixed rate long bond issue in the Corporation's 64 year history.

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Further downward movements in the all-in yield rates for Manitoba bonds occurred toward the latter part of the quarter. On March 2, 2015, Manitoba Hydro secured long term debt series **GK** for CAD \$300 million and a September 5, 2046 maturity date. GK was issued at a discount with proceeds of \$296.8 million (net of commissions), a fixed rate coupon of 2.850%, and an all-in yield of 2.902%. The debt was issued to finance new borrowing requirements and represented the inaugural tranche of Manitoba's new 30 year benchmark bond. Debt series GK, with an all-in yield of 2.902% (excluding 1% PGF), set a new record for the lowest fixed rate long bond debt issue in the Corporation's history (surpassing both FR-3 and the previous record holder C129, which had been issued in July 2012 at 3.178%).

On April 16, 2015, Manitoba Hydro secured long term debt series **GK-2** for CAD \$300 million and a September 5, 2046 maturity date. GK-2 was issued at a discount with proceeds of \$297.0 million (net of commissions), a fixed rate coupon of 2.850%, and an all-in yield of 2.898%. The debt was issued to finance new borrowing requirements. Debt series GK-2, with an all-in yield of 2.898% (excluding 1% PGF), set another new record for the lowest fixed rate long bond debt issue in the Corporation's history (surpassing GK issued in March 2015).

The cash requirements in 2015/16 do not vary significantly between those previously forecast in the Application (IFF14) and in the update (PUB/MH I-10b Attachment B). The interest rates forecasted for projected 2015/16 debt issues (excluding 1% PGF) changed from 4.10% in the Application to 3.00% in the update (5.10% and 4.00% including the 1% PGF).

Manitoba Hydro monitors the financial markets on an ongoing basis and will continue to secure advantageous financings for the benefit of Manitoba Hydro's current and future ratepayers.

Response to part d)

The lower interest rates in the scenarios lead to a reduction in the capitalized interest rate (which reduces the credited amount of interest allocated to construction). The change in the capitalized interest is not visually apparent in the chart provided in response to PUB/MH-I-9 due to the large scale on the vertical axis of the diagram. However, Attachment 4 which is provided in part b of this response shows the forecasted dollar impact arising from the change in the amount of capitalized interest between the Application and the update scenario. For example, the largest yearly decrease in interest allocated to construction of \$39 million occurs in fiscal 2018 and the cumulative decrease over the 20 year period is \$180 million.

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ATTACHMENT 1 MANITOBA HYDRO Summary of Total Finance Expense IFF14 Interest Rate Update (\$ millions CAD)

	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Forecast 2015	Forecast 2016	Forecast 2017	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021
Interest on Short & Long Term Debt Gross Interest Provincial Guarantee Fee Amortization of (Premiums), Discounts, and Transaction Costs Intercompany Interest Receivable Total Interest on Short & Long Term Debt	\$ 469 \$ 70 (12) (18) 509	472 \$ 72 (11) (16) 517	472 \$ 77 3 (16) 535	490 \$ 82 0 (17)	515 \$ 90 0 (19)	528 96 2 (19)	\$ 554 105 3 (21)	\$ 602 118 3 (22)	\$ 690 140 2 (24) 807	\$ 830 167 2 (30)	\$ 922 \$ 196 2 (35)	996 \$ 211 2 (40) 1,169	1,034 223 3 (43)
Interest Allocated to Construction	(74)	(98)	(136)	(167)	(138)	(140)	(146)	(197)	(283)	(398)	(357)	(314)	(102)
Interest Earned on Sinking Fund Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges Revaluation of Dual Currency Bonds Corporate Allocation Other Amortization	(25) (11) 32 (18) 20	(24) 6 (31) (18) 20	(17) 1 4 (19) 20	(10) (0) 3 (19) 24	(10) 2 3 (19) 27	(24) (19) 2 (19) 28	(0) (11) 1 (19) 29	(2) (17) 1 (19) 29	(7) (11) 1 (19) 29	(18) (15) 1 (19) 29	(22) (6) 1 (19) 30	(23) (9) 1 (19) 30	(20) (10) 1 (19) 50
Total Finance Expense	\$ 433 (\$	373 \$	388 \$	385 \$	452 \$	435	\$ 495	\$ <u>497</u>	\$ <u>518</u>	\$ <u>551</u>	<mark>\$ 712</mark> \$	836	1,119

	Forecast 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034
Interest on Short & Long Term Debt													
Gross Interest	\$ 1,040	\$ 1,023	\$ 1,033	\$ 1,038	\$ 1,037	\$ 1,039	\$ 1,038	\$ 1,035	\$ 1,019	\$ 997	\$ 917	\$ 896	\$ 874
Provincial Guarantee Fee	229	227	229	231	230	230	232	231	231	230	222	222	222
Amortization of (Premiums), Discounts, and Transaction Costs	4	3	1	2	2	2	2	3	3	3	4	4	4
Intercompany Interest Receivable	(32)	(25)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(36)	(36)	(37)
Total Interest on Short & Long Term Debt	1,241	1,229	1,236	1,243	1,241	1,241	1,241	1,237	1,219	1,195	1,107	1,086	1,063
Interest Allocated to Construction	(11)	(12)	(15)	(18)	(22)	(23)	(15)	(17)	(18)	(21)	(22)	(25)	(31)
Interest Earned on Sinking Fund	(19)	(6)	(8)	(12)	(14)	(27)	(40)	(52)	(61)	(72)	(54)	(66)	(79)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	(12)	(7)	-	-	-	-	-	-	-	-	-	-	-
Revaluation of Dual Currency Bonds	2	2	2	2	2	-	-	-	-	-	-	-	-
Corporate Allocation	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(17)	(16)	(16)	(16)	(16)
Other Amortization	47	46	44	43	42	41	40	39	38	37	36	34	33
Total Finance Expense	\$ 1,229	\$ 1,231	\$ 1,240	\$ 1,239	\$ 1,230	\$ 1,214	\$ 1,208	\$ 1,188	\$ 1,161	\$ 1,122	\$ 1,050	\$ 1,012	\$ 970

ATTACHMENT 2 MANITOBA HYDRO Summary of Total Finance Expense IFF14 Interest Rate and Revenue Update (\$ millions CAD)

Interest on Short & Long Term Debt		009	2010	2011		2042	2044	2045	2046	2047	2040	2040	2020	Forecast
Interest on Short & Long Term Debt				2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Gross Interest \$	\$ 4	69 \$	472 \$	472 \$	490 \$	515 \$	528	\$ 554	\$ 602	\$ 691	\$ 833	\$ 926 \$	\$ 1,001	\$ 1,041
Provincial Guarantee Fee		70	72	77	82	90	96	105	118	140	167	196	212	224
Amortization of (Premiums), Discounts, and Transaction Costs	(12)	(11)	3	0	0	2	3	3	2	2	2	2	3
Intercompany Interest Receivable	(18)	(16)	(16)	(17)	(19)	(19)	(21)	(22)	(24)	(30)	(35)	(40)	(43)
Total Interest on Short & Long Term Debt	5	09	517	535	555	587	608	640	701	809	972	1,089	1,175	1,226
Interest Allocated to Construction	(74)	(98)	(136)	(167)	(138)	(140)	(146)	(197)	(283)	(398)	(357)	(314)	(102)
Interest Earned on Sinking Fund		(25)	(24)	(17)	(10)	(10)	(24)	(0)	(2)	(7)	(18)	(22)	(23)	(20)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	(11)	6	1	(0)	2	(19)	(11)	(17)	(11)	(15)	(6)	(9)	(10)
Revaluation of Dual Currency Bonds		32	(31)	4	3	3	2	1	1	1	1	1	1	1
Corporate Allocation	(18)	(18)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)
Other Amortization		20	20	20	24	27	28	29	29	29	29	30	30	50
							•							
Total Finance Expense	\$ 4	33 \$	373 \$	388 \$	385 \$	452 \$	435	\$ 495	\$ 497	\$ 520	\$ 553	\$ 716 \$	841	\$ 1,127

	202	2 2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Interest on Short & Long Term Debt													
Gross Interest	\$ 1,049	\$ 1,034	\$ 1,047 \$	1,053	1,057	\$ 1,061 \$	1,066	\$ 1,066 \$	3 1,054 \$	1,035 \$	959 \$	942 \$	924
Provincial Guarantee Fee	230	229	231	234	234	235	236	237	237	236	228	228	228
Amortization of (Premiums), Discounts, and Transaction Costs	4	3	1	2	2	2	2	3	3	3	4	4	4
Intercompany Interest Receivable	(32) (25)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(36)	(36)	(37)
Total Interest on Short & Long Term Debt	1,251	1,241	1,252	1,261	1,264	1,268	1,274	1,274	1,260	1,240	1,156	1,138	1,119
Interest Allocated to Construction	(11) (12)	(15)	(18)	(22)	(23)	(15)	(17)	(18)	(21)	(22)	(25)	(31)
	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Earned on Sinking Fund	(19) (6)	(8)	(12)	(14)	(27)	(40)	(53)	(62)	(74)	(56)	(68)	(81)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	(12) (7)	-	-	-	-	-	-	-	-	-	-	-
Revaluation of Dual Currency Bonds	2	2	2	2	2	-	-	-	-	-	-	-	-
Corporate Allocation	(19) (19)	(19)	(19)	(19)	(19)	(19)	(19)	(17)	(16)	(16)	(16)	(16)
Other Amortization	47	46	44	43	42	41	40	39	38	37	36	34	33
Total Finance Expense	\$ 1,240	\$ 1,244	\$ 1,257	1,258	1,253	\$ 1,240 \$	1,240	\$ 1,224 \$	3 1,201 \$	1,166 \$	1,097 \$	1,062 \$	1,024

Forecast For

ATTACHMENT 3 MANITOBA HYDRO Interest Rate Update Less Original IFF14 (\$ millions CAD)

	Actual 2009	,	Actual 2010	Actual 2011	,	Actual 2012	Actual 2013	Actual 2014	Fo	recast 2015	Forecast 2016	Forecast 2017	Forecast 2018	Forecas 201		Forecast 2021	
Interest on Short & Long Term Debt Gross Interest	\$ -	\$	-	\$ -	\$	_	\$ -	\$ -	\$	0 :	\$ (25)	\$ (66)	\$ (73)	\$ (73) \$ (80)	\$ (86))
Provincial Guarantee Fee Amortization of (Premiums), Discounts, and Transaction Costs	-		-	-		-	-	-		(0)	- -	(0) (0)	(1) -	(1 -) (2)	(2)	1
Intercompany Interest Receivable Total Interest on Short & Long Term Debt	-		-	-		-	-	-		0	(24)	(63)	(71)	(<mark>72</mark>	(79)	(<mark>86)</mark>	į
Interest Allocated to Construction	-		-	-		-	-	-		-	10	32	39	30	27	10	
Interest Earned on Sinking Fund	-		-	-		-	-	-		0	0	1	1	2	1	1	
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	-		-	-		-	-	-		-	-	(0)	-	-	-	-	
Revaluation of Dual Currency Bonds Corporate Allocation	-		-	-		-	-	-		-	-	-	-	-	-	-	
Other Amortization	 -		-	-		-	-	-		(0)	(0)	(0)	(0)	(0) (0)	(0)	<u></u>
Total Finance Expense	\$ -	\$	-	\$ -	\$	-	\$ -	\$ -	\$	0	\$ (13)	\$ (30)	\$ (31)	\$ (40) \$ (51)	\$ (75)	_

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Interest on Short & Long Term Debt													
Gross Interest	\$ (96) \$	(102) \$	(108) \$	(111) \$	(117) \$	(124) \$	(129) \$	(136) \$	(142) \$	(146) \$	(150) \$	(155) \$	(158)
Provincial Guarantee Fee	(3)	(4)	(5)	(5)	(6)	(7)	(8)	(8)	(10)	(10)	(10)	(10)	(10)
Amortization of (Premiums), Discounts, and Transaction Costs	- '	-	- '	-	-	-	- '	-	-	-	-	-	-
Intercompany Interest Receivable	1	1	1	1	1	2	2	2	2	3	3	3	3
Total Interest on Short & Long Term Debt	(98)	(104)	(111)	(115)	(122)	(130)	(135)	(142)	(149)	(154)	(157)	(161)	(165)
Interest Allocated to Construction	1	1	2	2	3	3	2	2	2	3	2	2	7
Interest Earned on Sinking Fund	1	1	1	1	2	3	5	6	8	9	8	10	12
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	-	-	-	-	-	-	-	-	-	-	-	-	-
Revaluation of Dual Currency Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporate Allocation	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Amortization	 -	-	-	-	-	-	-	-	-	-	-	-	
Total Finance Expense	\$ (96) \$	(103) \$	(109) \$	(112) \$	(117) \$	(124) \$	(129) \$	(134) \$	(139) \$	(141) \$	(147) \$	(149) \$	(146)

Forecast For

ATTACHMENT 4
MANITOBA HYDRO
Interest Rate & Revenue Update Less Original IFF14
(\$ millions CAD)

	Actual 2009	Actual 2010	Actual 2011	Actua 2012	Actua 2013	Actual 2014	Fo	recast 2015	Forecast 2016	Forecast 2017	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021
Interest on Short & Long Term Debt														
Gross Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	0 9	\$ (24)	\$ (64)	\$ (70)	\$ (70)	\$ (75)	\$ (79)
Provincial Guarantee Fee	-	-	-	-	-	-		(0)	-	0	(0)	(0)	(1)	(1)
Amortization of (Premiums), Discounts, and Transaction Costs	-	-	-	-	-	-		-	-	(0)	-	-	-	-
Intercompany Interest Receivable	-	-	-	-	-	-		0	1	3	2	2	2	3
Total Interest on Short & Long Term Debt	-	-	-	-	-	-		0	(23)	(61)	(68)	(68)	(73)	(78)
Interest Allocated to Construction	-	-	-	-	-	-		-	10	32	39	30	27	10
Interest Earned on Sinking Fund	_	_	_	_	_	-		0	0	1	1	2	1	1
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	-	-	-	-	-	-		-	-	(0)	-	-	-	-
Revaluation of Dual Currency Bonds	-	-	-	-	-	-		-	-	-	-	-	-	-
Corporate Allocation	-	-	-	-	-	-		-	-	-	-	-	-	-
Other Amortization	-	-	-	-	-	-		-	-	-	-	-	-	
Total Finance Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	0 :	\$ (13)	\$ (28)	\$ (28)	\$ (35)	\$ (46)	\$ (67)

edges

Fo	recast 2022	Forecast 2023	Forecast 2024		Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034
\$	(88) (1)	\$ (91) (2)	\$ (94) (2)	\$ (96) (2)	\$ (98) (2)	\$ (102) (3)	\$ (102) (3)	\$ (105) (2)	\$ (107) (4)	\$ (108) (4)	\$ (108) (4)	\$ (108) \$ (4)	i (108) (4)
	- 1	- 1	- 1	- 1	1	2	2	2	2	3	3	3	3
	(87)	(92)	(95)	(96)	(99)	(103)	(103)	(105)	(109)	(109)	(109)	(109)	(109)
	1	1	2	2	3	3	2	2	2	3	2	2	7
	1	1	1	1	2	3	4	6	7	8	7	8	10
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
\$	(86)	\$ (90)	\$ (92)	\$ (93)	\$ (94)	\$ (97)	\$ (97)	\$ (97)	\$ (99)	\$ (98)	\$ (100)	\$ (99) \$	(92)



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-9

Section:	Tab 3: Appendix 3.7	Page No.:	3
Topic:	Integrated Financial Forecast & Econ	nomic Outlook	
Subtopic:	Debt Management		
Issue:	Growth in Debt Levels		

PREAMBLE TO IR (IF ANY):

QUESTION:

Please provide an updated Chart 1 including accumulated capitalized interest, in similar detail as PUB/MH I-101 (NFAT). Please provide a table of corresponding data points.

RATIONALE FOR QUESTION:

This Information Request seeks to visualize gross debt accumulation over the forecast timeframe.

RESPONSE:

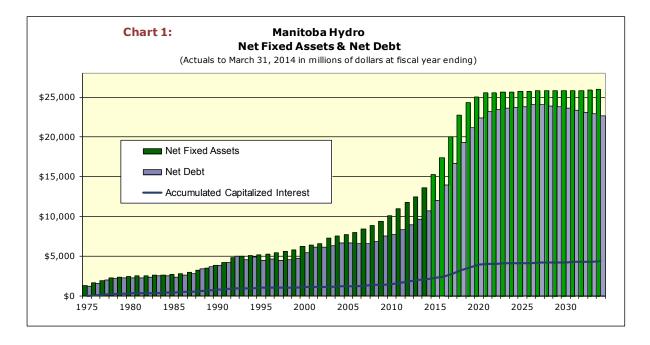
The chart in PUB/MH I-101 from the 2012/13 & 2013/14 GRA depicted the consolidated net fixed assets and net long term debt information (with actual values for the fiscal years ending 1990 - 2012, and forecast IFF11-2 values for fiscal years ending 2013 - 2032). Net assets are the total property, plant and equipment less accumulated depreciation plus construction work in progress. Net long term debt is gross debt less sinking funds/ investments (accumulated capitalized interest is not used in the calculation of gross or net debt levels).

Chart 1 from the Debt Management Strategy in Appendix 3.7 updated the aforementioned consolidated net fixed assets and net long term debt information (with actual values going back to fiscal year ending 1975 updated to 2014, and updated IFF14 forecast values for the fiscal years ending 2015 to 2034). This chart and the corresponding data points (with accumulated capitalized interest commencing in 1975) are as follows:

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-9



Fiscal	Net	Net	Accumulated
Year	Assets	Long Term	Capitalized
Ending	7,000,0	Debt	Interest
1975	1,336	1,225	50
1976	1,656	1,616	98
1977	1,972	1,990	160
1978	2,259	2,168	234
1979	2,413	2,331	292
1980	2,489	2,271	320
1981	2,529	2,298	342
1982	2,569	2,373	368
1983	2,632	2,541	397
1984	2,685	2,528	429
1985	2,731	2,423	468
1986	2,856	2,603	502
1987	3,015	2,805	547
1988	3,242	3,443	605
1989	3,541	3,656	681
1990	3,882	3,889	778
1991	4,267	4,199	888
1992	4,857	4,972	960
1993	4,983	4,533	993
1994	5,067	4,948	1,009
1995	5,170	4,508	1,023
1996	5,310	4,685	1,042
1997	5,464	4,493	1,058
1998	5,608	4,559	1,077
1999	5,774	4,772	1,097
2000	6,235	5,488	1,112
2001	6,428	6,114	1,128
2002	6,626	6,146	1,154
2003	7,305	6,320	1,182
2004	7,536	6,675	1,213

Fiscal Year Ending	Net Assets	Net Long Term Debt	Accumulated Capitalized Interest
2005	7,776	6,642	1,246
2006	8,010	6,614	1,281
2007	8,415	6,597	1,328
2008	8,912	6,852	1,388
2009	9,382	7,521	1,444
2010	10,128	7,716	1,543
2011	10,954	8,365	1,681
2012	11,797	9,011	1,851
2013	12,508	9,634	1,992
2014	13,627	10,757	2,134
2015	15,258	12,034	2,279
2016	17,387	13,983	2,486
2017	20,069	16,694	2,802
2018	22,763	19,342	3,239
2019	24,324	21,168	3,627
2020	25,081	22,409	3,968
2021	25,588	23,205	4,080
2022	25,608	23,503	4,092
2023	25,645	23,615	4,106
2024	25,664	23,747	4,123
2025	25,725	23,837	4,143
2026	25,776	24,089	4,167
2027	25,814	24,083	4,192
2028	25,831	23,866	4,209
2029	25,851	23,839	4,229
2030	25,836	23,605	4,249
2031	25,851	23,367	4,273
2032	25,862	23,154	4,298
2033	25,901	22,933	4,326
2034	26,006	22,705	4,363

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Financial Information MFR 5

A table, which details the debt to equity ratio, capital coverage ratio and interest coverage ratio, net assets, net income, total debt and retained earnings, DBRS bond ratings, total Provincial Debt and total MH debt to total Manitoba debt in each year since 1992.

Please see the table on the following page which shows consolidated information. Information relating to the Province of Manitoba was provided by the Province.

Tindricial Tilstory		Capital	Interest	Total	МН	Total	МН	DBRS Bond	Total	Total MH
	Debt/Equity	Coverage	Coverage	МН	Net	МН	Retained	Rating	Province of	Debt to Total
	Ratio	Ratio	Ratio	Assets	Income	Debt	Earnings	*	MB Debt	MB Debt
2014	76.24	1 25	1 20	15,639	174	1 <mark>0,868</mark>	<mark>2,716</mark>	A (high)	32,629	33.3%
	76:24	1.35	1.28					A (high)		
2013	75:25	1.25	1.15	14,542	92	9,985	2,542	A (high)	30,563	32.7%
2012	74:26	1.13	1.10	13,791	61	9,382	2,450	A (high)	28,698	32.7%
2011	73:27	1.25	1.27	12,882	150	8,647	2,389	A (high)	25,617	33.8%
2010	73:27	1.30	1.32	12,437	163	8,538	2,239	A (high)	24,431	34.9%
2009	77:23	1.77	1.48	11,547	266	8,187	2,076	A (high)	22,727	36.0%
2008	73:27	1.62	1.69	11,766	346	7,571	1,822	A (high)	22,056	34.3%
2007	80:20	1.10	1.23	10,922	122	7,227	1,407	A (high)	20,476	35.3%
2006	81:19	2.28	1.77	10,482	415	7,169	1,285	A (high)	19,828	36.2%
2005	85:15	1.20	1.25	9,952	136	7,204	870	A (high)	19,410	37.1%
2004	87:13	(0.32)	0.17	9,903	(436)	7,390	734	A (high)	18,206	40.6%
2003	80:20	1.10	1.14	10,234	71	7,268	1,170	A (high)	17,810	40.8%
2002	77:23	1.67	1.42	10,405	214	7,661	1,302	Α	20,682	37.0%
2001	80:20	1.18	1.62	9,966	270	7,464	1,088	Α	20,459	36.5%
2000	83:17	1.28	1.35	8,692	152	6,770	818	Α	19,878	34.1%
1999	84:16	1.22	1.23	7,866	100	5,883	666	Α	18,278	32.2%
1998	86:14	1.13	1.25	7,617	111	5,548	566	Α	17,378	31.9%
1997	88:12	1.12	1.23	7,133	101	5,175	455	Α	16,886	30.6%
1996	91:09	1.00	1.16	6,737	70	5,284	354	Α	16,763	31.5%
1995	92:08	1.00	1.13	6,449	56	5,034	284	Α	16,481	30.5%
1994	93:07	n/a	1.16	6,543	70	5,406	228	Α	15,670	34.5%
1993	95:05	n/a	0.95	6,025	(24)	4,971	159	Α	14,127	35.2%
1 <mark>992</mark>	94:06	n/a	1.04	6,505	18	5,441	183	Α	12,776	42.6%

^{*} The DBRS long term credit rating for the period from 1992-2014 is the same for both the Manitoba Hydro-Electric Board and the Province of Manitoba.



Section:	Tab 3: Section 3.1	Page No.:	2		
Topic:	Integrated Financial Forecast & Economic Outlook				
Subtopic:	Key Financial Risks				
Issue:	Credit Rating of Province of Manitoba & Manitoba Hydro				

PREAMBLE TO IR (IF ANY):

QUESTION:

- a) Please file any analyses undertaken by Manitoba Hydro or third parties that address the impact of a provincial credit rating downgrade on Manitoba Hydro's borrowing costs.
- b) Would projected losses of approximately \$1B over ten years impact the credit rating of the Province of Manitoba?
- c) What would such impacts mean for Manitoba Hydro and the taxpayer of Manitoba?

RATIONALE FOR QUESTION:

This Information Request seeks to quantify the impact of a downgrade to the Province's credit rating, which Manitoba Hydro has identified as a risk factor.

RESPONSE:

Response to part a)

Manitoba Hydro receives long term debt advances and a flow through credit rating from the Province of Manitoba. Definitive analysis to address the impact of a potential provincial credit rating downgrade on Manitoba Hydro's borrowing costs and access to financing is not available.

The financial markets are a complex system with many moving parts and the last downgrade for the Province of Manitoba occurred nearly 30 years ago in 1986. Credit rating agency

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opinions, as an indicative proxy for the financial markets, are also complex. Care needs to be taken to avoid the oversimplification that may occur when seeking direct line linkages to specific events or actions. Occasionally, credit rating announcements may move the financial markets, but more commonly, financial markets may price in changes in creditworthiness in advance of a credit rating announcement.

The absolute level of benchmark Government of Canada (GoC) bond yields, as well as the credit spread between these GoC benchmarks and the associated provincial bonds, change dynamically in the capital markets in response to the complex interaction of financial market participants. The provincial credit spreads are also benchmarked relative to the Province of Ontario bonds as Ontario is the largest issuer of provincial bonds.

On August 18, 2014 Moody's placed the Province of Manitoba's Aa1 long term debt rating on a negative outlook. Since mid-July 2014, the Province of Manitoba's provincial credit spreads relative to the Ontario provincial benchmark have weakened by 7 to 9 basis points for 10 and 30 year bonds respectively; although it remains unclear to what degree the negative outlook impacted the relative spread performance as investors have recently shown a preference for big liquid issues of Ontario and Quebec in these markets as opposed the less frequent issuers such as Manitoba.

Should the credit rating for the Province of Manitoba be downgraded, it would be anticipated that interest rates and associated finance borrowing costs for Manitoba Hydro may rise. The financial impact upon Manitoba Hydro's access to financing and borrowing costs would depend upon a number of factors, including, but not limited to:

- the financial market context in which the downgrade occurred including market tone, investor appetite and liquidity;
- the degree to which changes in the relative provincial credit spreads may have been priced into the financial market in advance of any credit rating announcement;
- which credit rating agency provided the downgrade;
- investor credit risk policy limits and credit rating requirements;
- the denomination of the issue; and
- the term to maturity of a new debt issue.

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Moody's P-1 short term rating on the Manitoba Hydro-Electric Board's commercial paper program was not affected. Credit ratings and outlooks from S&P and DBRS remained unchanged. Moody's also placed the Province of Ontario's Aa2 long term debt rating on a negative outlook on July 2, 2014.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-6a-c

Response to part b) and c)

To the extent that Manitoba Hydro maintains its self-supporting status, the contingent liability represented by Manitoba Hydro's debt to the Province of Manitoba is low, and Manitoba Hydro's capital investment plans and capital structure should have no significant impact on the Province of Manitoba's credit rating.

Considering the unprecedented levels of debt financing during the next few years, the projected losses of approximately \$1 billion over a ten year period in the IFF14 base case (which includes the assumption of 3.95% annual rate increases), would place downward pressure on the Corporation's self-supporting status. While the capital markets are deep, this level of debt financing may also apply pressure on the province's credit spreads.

Credit rating agencies have not provided precise definitions of the term self-supporting when evaluating the contingent liability represented by Manitoba Hydro's debt to the Province of Manitoba. It is Manitoba Hydro's view that a useful general definition was given by Moody's in the following quote (emphasis added):

"Roughly one third of the province's total direct and indirect debt is attributed to Manitoba Hydro (issued and on-lent by the province) and is considered to be self-supporting. This Crown Corporation's ability to meet its own financial obligations, without recourse to provincial subsidies is a positive credit attribute for the province." ²

The credit rating agencies each consider Manitoba Hydro's financial performance, ratios and forecasts; and each currently view Manitoba Hydro's long term debt advances from the Province of Manitoba to be self-supporting. Consequently, when assessing the Province of Manitoba's ratio of net tax-supported provincial debt as a percent of provincial GDP, the credit rating agencies exclude Manitoba Hydro's debt levels (the blue portion in the following pie chart) from the evaluation of the total provincial debt portfolio. Should Manitoba Hydro lose its self-supporting status and the contingent liability materialize, the potential impact to the Province of Manitoba and its taxpayers could be substantial.

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Moody's Investors Service, "Credit Analysis: Province of Manitoba" dated September 5, 2012; page 3 (previously filed at the 2012/13 & 2013/14 Electric GRA in Appendix 20 Attachment 20).



Manitoba Hydro 2014/15 & 2015/16 General Rate Application 31 PUB/MH-I-6a-c

Composition of Province of Manitoba Debt (\$30.0 billion, net of sinking funds) Actuals as at March 31, 2014 Province of Manitoba (excluding Manitoba Hydro) 65% Manitoba Hydro (self-supporting debt) 35%

Manitoba Hydro's ability to generate sufficient cash flows to meet its financial obligations is critical. Liquidity and access to capital will be essential for business continuity. To span across short term cash shortfalls, for example during the 2003/04 drought, Manitoba Hydro can undertake a series of actions (such as cash conservation, bridge financing and higher rate increases). Over longer periods of cash shortfalls, such as during an extended period of net losses, it would become increasingly more challenging to avoid the need for provincial subsidies, especially if the shortfalls were to occur at a vulnerable time (for example, when Manitoba Hydro's retained earnings and the equity ratio is low, and/or if the Corporation is unduly exposed to interest rate risk in a period of sharply rising interest rates).

Manitoba Hydro is of the view that the IFF14 base case, with the 3.95% rate increases, is manageable and that Manitoba Hydro's self-supporting status will be maintained. More adverse circumstances (for example with the lower rate increases such as those identified in Appendix 3.5 as scenarios A-D, or in severe drought or rising interest rates) would place significant downward pressure on the Corporation's financial health and stability.

Moving forward, Manitoba Hydro will continue to take appropriate actions to ensure it remains a self-supporting corporation and that the contingent liability represented by Manitoba Hydro's debt does not materialize. This includes seeking the annual rate increases necessary to maintain financial ratios and rate stability for customers. Based on the financial outlook in MH14, the 3.95% annual proposed and indicative rate increases are the minimum required. As described in Tab 2 Section 2.3.6:

"Higher rate increases in the order of 5.5% to 6.0% for the next four years would be necessary to reduce the losses that are projected in the next 10 year

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-6a-c

period and maintain financial reserves at current levels. This would reduce the risk of the need for larger rate increases in the event of a significant drought or adverse financial conditions. Despite these risks, Manitoba Hydro has maintained the minimum proposed rate increases at the 3.95% level in consideration of customer sensitivity to rate increases."

The credit rating agencies are aware of Manitoba Hydro's 3.95% forecasted annual rate increases and have expectations that the regulatory framework will continue to be supportive of the Corporation's rate applications. The capacity to raise rates is also seen positively by credit rating agencies, for example by DBRS (see Appendix 3.8: DBRS report on Manitoba Hydro dated October 23, 2014; page 2):

"Low-cost hydroelectric-based generating capacity results in one of the lowest variable cost structures in North America, which has enabled Manitoba Hydro to provide electricity to its domestic customers at one of the lowest rates on the continent. This gives the Utility the flexibility to increase rates in the future, especially in light of the substantially heightened capex requirements."

Manitoba Hydro's financial strength is fundamental and Manitoba Hydro agrees with the PUB when they found the following in Orders 116/08 and 43/13:

"It is the Board's understanding that rating agencies look prominently at MH's financial strength in assessing the credit rating of the Province. A weakening of the financial strength of MH would not be viewed favourably by those credit rating agencies and may have implications impacting the credit rating of the Province, making provincial borrowing more expensive. Such a development would not be in the public interest." ⁴

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³ As stated by Moody's:

[&]quot;Manitoba Hydro operates in a stable regulatory framework with steady yearly rate increases. It forecasts annual rate increases of 3.95% until FY2033 to contribute to replacing aging generation, transmission and distribution facilities." [report on Manitoba Hydro dated November 6, 2014 (see Appendix 3.8, or Tab 3 page 20)].

As stated by DBRS:

[&]quot;Manitoba's Public Utilities Board (PUB) has been supportive of Manitoba Hydro's rate applications and its financial targets." [page 2 of their report on the Manitoba Hydro-Electric Board dated November 28, 2011 (see Appendix 20 Attachment 4 from the 2012/13 & 2013/14 Electric GRA)].

⁴ Public Utilities Board of Manitoba Order 116/08; Page 130.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-6a-c

"The Board notes that Manitoba Hydro shares the benefit of the flow-through credit rating of the Province, which affords it preferential interest rates on its debt and access to funds to meet its major capital spending program. However, as its debt grows, there is a potential for Manitoba Hydro's financial condition to affect the credit rating of the Province. It is important that Manitoba Hydro remains a financially strong and viable organization." ⁵

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⁵ Public Utilities Board of Manitoba Order 43/13; Page 23.



Section:	Tab 3: Section 3.1	Page No.:	PUB/MH I-6 (b) & (c)		
Topic:	Integrated Financial Forecast & Economic Outlook				
Subtopic:	Key Financial Risks				
Issue:	Credit Rating of Province of Manitoba & Manitoba Hydro				

PREAMBLE TO IR (IF ANY):

In PUB/MH I-6, MH states that:

Considering the unprecedented levels of debt financing during the next few years, the projected losses of approximately \$1 billion over a ten year period in the IFF14 base case (which includes the assumption of 3.95% annual rate increases), would place downward pressure on the Corporation's self-supporting status. While the capital markets are deep, this level of debt financing may also apply pressure on the province's credit spreads.

QUESTION:

- a) If MH's budgeted deficit of approximately \$1 billion has the potential to apply pressure on the province's credit spreads, could that mean higher borrowing costs for the Province?
- b) Please explain what pressure on the Province's credit spreads might mean related to the Province's and Manitoba Hydro's cost of borrowing.
- c) Please indicate whether MH has provided any analysis of the potential impact of MH forecasting \$1 billion in losses on the Provincial treasury.
- d) Please indicate the potential increase in borrowing costs over the forecast period if the Credit Rating of the Province was downgraded one level. Provide the estimated incremental increase in interest rates and borrowing costs.

RATIONALE FOR QUESTION:

To understand the implications of MH's forecasts on borrowing costs and the Province.

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-II-72a-d

RESPONSE:

Response to part a) and b)

Manitoba Hydro's budgeted deficits of approximately \$1 billion, if realized and unmitigated, have the potential to lead to higher borrowing costs for Manitoba Hydro and the Province.

Substantial cash shortfalls, for example in the case of severe drought or if the projected losses of approximately \$1 billion over a ten year period in the IFF14 base case become realized (which includes the assumption of 3.95% annual rate increases), would place downward pressure on the Corporation's self-supporting status. While the capital markets are deep, this level of debt financing may also apply pressure on the province's credit spreads. As these cash shortfalls would likely require additional debt financing, more supply of Manitoba bonds would be placed into the financial markets which may require pricing incentives for investors in the form of wider credit spreads and higher bond yields.

Manitoba Hydro has undertaken a number of debt management activities in order to mitigate the potential pressure on Manitoba credit spreads, such as:

- Reducing the interest rate risk exposure on the existing debt portfolio by decreasing the proportion of floating rate debt within the portfolio.
- Reducing the interest rate risk exposure on the existing debt portfolio by extending the weighted average term to maturity by issuing longer dated debt, including the issuance of ultra long debt with terms to maturity beyond 30 years.
- Managing the refinancing risk within the existing debt portfolio by having a relatively smooth debt maturity schedule.
- Reducing Manitoba Hydro's liquidity risk and enhancing financing flexibility by maintaining positive cash balances and/or access to liquidity.
- Establishing benchmark sized debt issues so that investors may reduce their market risk by having liquid bonds that can be readily traded in the financial markets.
- Diversifying the investor base by varying the terms to maturity for debt issuance so that investors with different term preferences may participate in Manitoba issues.
- Diversifying the investor base beyond the domestic Canadian capital markets by issuing Manitoba bonds into international markets.

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-II-72a-d

Response to part c)

Manitoba Hydro cannot disclose cabinet confidences nor does it disclose advice, opinions, recommendations, analyses or policy options developed by or for a minister. In Order 33/15, the PUB accepted Manitoba Hydro's submission that cabinet confidences should not be disclosed.

Response to part d)

The incremental increase in interest rates and borrowing costs associated with a one level downgrade cannot be conclusively determined. As described in response to PUB/MH-I-6, should the credit rating for the Province of Manitoba be downgraded, the financial impact upon Manitoba Hydro's access to financing and borrowing costs would depend upon a number of factors. The financial markets are a complex system with many moving parts and the last downgrade for the Province of Manitoba occurred nearly 30 years ago in 1986. On August 18, 2014 Moody's placed the Province of Manitoba's Aa1 long term debt rating on a negative outlook. Manitoba Hydro observes that since mid-July 2014, the Province of Manitoba's provincial credit spreads relative to the Ontario provincial benchmark have weakened by 7 to 10 basis points for 10 and 30 year bonds respectively (although it remains unclear to what degree the negative outlook impacted the relative spread performance as investors have recently shown a preference for big liquid issues of Ontario and Quebec in these markets as opposed the less frequent issuers such as Manitoba).

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Moody's P-1 short term rating on the Manitoba Hydro-Electric Board's commercial paper program was not affected. Credit ratings and outlooks from S&P and DBRS remained unchanged. Moody's also placed the Province of Ontario's Aa2 long term debt rating on a negative outlook on July 2, 2014.

Finance Expense-Debt Levels MFR 5

A continuity schedule of the short and long-term debt for the fiscal years 2004 to 2032 detailing the retirement of existing debt and the issue of new debt, include the debt ratio. Indicate the proportion of short-term debt to total debt for each of the years.

The attached schedule of short and long term debt conforms to the Corporation's financial statement presentation, with measurement in Canadian dollars (CAD) and which in accordance with accounting standards specify the most outward obligation dates on any debt series (the latter of physical debt or forward interest rate swap maturity dates).

Long term debt refers to borrowings which have a term to maturity equal to or greater than one year, and is made up of fixed rate debt with non-variable interest rates and floating rate debt which have a periodic interest rate resetting mechanism prior to maturity. Note that some of the long term debt issues may be retired at their maturity. Manitoba Hydro will consider the availability of sinking fund withdrawals and surplus cash to reduce the required refinancing of maturing debt.

Short term debt refers to borrowings with non-variable interest rates which have a term to maturity of less than one year. The short term borrowing program is a \$500 million 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.

See the Debt Management Strategy in Appendix 3.7 for additional information regarding the Corporation's debt financing requirements and strategies.

Finance Expense - Debt Levels MFR5

MANITOBA HYDRO Continunity Schedule Consolidated Short and Long Term Debt

Actuals to December 31, 2014 (in \$ millions Canadian Dollars)

Long Term Debt
Opening Balance
Long Term Debt Proceeds
Long Term Debt Matured
Carrying Value Adjustments*

Closing Balance

Actual	Forecast	Forecast	Forecast	Forecast										
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
7,268	7,390	7,204	7,169	7,227	7,571	8,187	8,538	8,647	9,382	9,985	10,868	12,034	14,159	17,028
1,013	300	180	173	981	423	1,425	915	698	807	1,320	1,983	2,400	3,200	3,200
(473)	(241)	(111)	(80)	(311)	(366)	(452)	(723)	(25)	(242)	(613)	(835)	(312)	(334)	(330)
(418)	(245)	(104)	(35)	(327)	559	(622)	(83)	62	38	176	18	37	3	3
7,390	7,204	7,169	7,227	7,571	8,187	8,538	8,647	9,382	9,985	10,868	12,034	14,159	17,028	19,901

^{*} Carrying Value Adjustments include changes in in the value of US dollar denominated debt upon conversion to CAD, as well as changes to the portfolio carrying value for transaction costs, premiums/ discounts, and dual currency bonds.

Short Term Debt
Opening Balance
Increase (Decrease)
Closing Balance

Actual	Forecast	Forecast	Forecast	Forecast										
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
128	93	59	-	148	-	100	-	-	-	-	-	83	142	55
(35)	(34)	(59)	148	(148)	100	(100)	-	-	-	-	83	59	(87)	56
93	59	-	148	-	100	-	-	-	-	-	83	142	55	111

Total Debt	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast								
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Long Term Debt	7,390	7,204	7,169	7,227	7,571	8,187	8,538	8,647	9,382	9,985	10,868	12,034	14,159	17,028	19,901
Short Term Debt	93	59		148	-	100	-	-	-	-	-	83	142	55	111
Total Debt	7,483	7,263	7,169	7,375	7,571	8,287	8,538	8,647	9,382	9,985	10,868	12,117	14,301	17,083	20,012
Proportion of Short Term Debt to Total Debt	1%	1%	0%	2%	0%	1%	0%	0%	0%	0%	0%	1%	1%	0%	1%
Consolidated Debt Ratio	87%	85%	81%	80%	73%	77%	73%	73%	74%	75%	76%	77%	81%	83%	84%

Finance Expense - Debt Levels MFR5

MANITOBA HYDRO Continunity Schedule Consolidated Short and Long Term Debt

Actuals to December 31, 2014 (in \$ millions Canadian Dollars)

Long Term Debt
Opening Balance
Long Term Debt Proceeds
Long Term Debt Matured

Carrying Value Adjustments*
Closing Balance

Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
19,901	21,509	22,772	23,527	23,414	23,557	23,859	23,861	24,215	24,417	24,420	24,563	24,466	23,769	23,760	23,734
2,800	1,600	1,600	600	600	600	400	800	200	-	200	-	-	-	-	-
(1,19 <mark>5</mark>)	(315)	(850)	(718)	(461)	(300)	(402)	(450)	-	-	(60)	(100)	(700)	(13)	(30)	-
3	(22)	5	5	5	3	4	4	2	3	3	3	3	4	4	4
21,509	22,772	23,527	23,414	23,557	23,859	23,861	24,215	24,417	24,420	24,563	24,466	23,769	23,760	23,734	23,738

^{*} Carrying Value Adjustments include changes in in the value of US dollar denominated debt upon conversion to CAD, as well as changes to the portfolio carrying value for transaction costs, premiums/ discounts, and dual currency bonds.

Short Term Debt
Opening Balance
Increase (Decrease)

Closing Balance

| Forecast |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
| 111 | 134 | 74 | 7 | 40 | 145 | 152 | 173 | 2 | - | 62 | - | - | - | - | - |
| 23 | (60) | (67) | 33 | 105 | 7 | 21 | (171) | (2) | 62 | (62) | - | - | - | - | - |
| 134 | 74 | 7 | 40 | 145 | 152 | 173 | 2 | - | 62 | - | - | - | - | - | - |

Total Debt	Forecast															
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Long Term Debt	21,509	22,772	23,527	23,414	23,557	23,859	23,861	24,215	24,417	24,420	24,563	24,466	23,769	23,760	23,734	23,738
Short Term Debt	134	74	7	40	145	152	173	2	-	62	-	-	-	-	-	-
Total Debt	21,643	22,846	23,534	23,454	23,702	24,012	24,034	24,217	24,417	24,482	24,563	24,466	23,769	23,760	23,734	23,738
•																
Proportion of Short Term Debt to Total Debt	1%	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Consolidated Debt Ratio	85%	86%	87%	88%	89%	89%	89%	89%	88%	87%	86%	84%	82%	79%	76%	73%

Finance Expense-Debt Levels MFR 7

A schedule detailing the maturities of MH's current long-term debt issues.

Please see the following long term debt maturity schedule as at December 31, 2014 for each debt series, identifying the currency for both interest and principal payments. This schedule excludes short term debt, which by definition have a term to maturity of less than one year.

The Maturity Dates in the third column from the left conform to the Corporation's financial statement presentation, which in accordance with accounting standards specify the most outward obligation dates on any debt series (the latter of physical debt or forward interest rate swap maturity dates).

The Action Dates in the fourth column from the left identify the maturities of the the physical debt. Therefore in cases where the maturity of underlying physical debt is before the linked forward interest rate swap for a debt series, a refinancing of the underlying physical debt will be required on the date highlighted in brown on the schedule.

The coupon rates (rounded to three decimal places for this schedule) identify the gross interest rates for each debt issue in its specified currency. The yield rates (rounded to three decimal places) conform to the Corporation's financial statement presentation, which in accordance with accounting standards show the effective all-in interest rate over the entire term of the debt issue (converted to Canadian dollars {CAD} where applicable). As floating rate debt will be subject to periodic interest rate resetting, the yield rate calculation for floating rate debt combines actual interest rates to the balance sheet date plus forecasted interest rates for the reminder of the time to the maturity date (utilizing the Corporation's forecasted interest rates for the variable component of the coupon payments).

The principal amounts are shown at par, with US dollar debt principal translated to CAD using the USD/CAD exchange rate on the balance sheet date.

MANITOBA HYDRO Long Term Debt Maturity Schedule with Action and Swap Dates At December 31, 2014 (in millions \$; with USD/CAD of 1.1601 at December 31, 2014)

Underlying physical	debt matures	s before linked swap
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Series (int) Princ) Date Date Rate Rate CAD (USD) (CAD)	Debt	Currency	Maturity	Action	Coupon	Yield	Principal	Principal	Total Principal
EY2 CAD CAD 061/21/5 051/21/5 8 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -								(USD)	
EYZ CAD/ CAD 1203/15 1203/15 3 BA + 0.044 % 2.263 % 50.0 50.0 EYZ CAD/ CAD 1203/15 1203/15 3 BA + 0.053 % 4.927 % 200.0 200.0 C121-3 CAD/ CAD 04/19/16 04/19/16 3 BA + 0.053 % 4.927 % 200.0 200.0 C121-3 CAD/ CAD 04/19/16 04/19/16 3 BA + 0.053 % 4.927 % 200.0 EXEMPLE SEAR CAD/ CAD 06/15/16 04/19/16 1.750 % 1.828 % 2.26 2.26 % 2.									
EY CADI CAD 1203115 1203115 38 BA + 0.053 % 4.927 % 200.0 200.0 100.0 16111-167X CADI CAD 0411916 0411916 021151									
C121-3 CAD C									
HB11-5FX CAD/ CAD 06/15/16 06/15/16 07/15/16 1.75/9 % 2.961 % 7.3 7.3 7.3 HB11-5FX CAD/ CAD 06/15/16 06/15/16 1.65/9 % 1.891 % 3.2 3									
HB112-BFL CADI CAD G6/15/16 G6/15/16 G6/15/16 1.550 % 1.828 % 22.6 22.6 HB12-BFL CADI CAD G7/17/16 G7/17/16 3 BA+1.808 % 4.205 % 200.6 200.6 CO11 CADI CAD G7/17/16 G7/17/17 G. 2.826 % 4.205 % 200.0 200.0 LADI CADI CAD GAD									
HB12-SFX CAD CAD GAP									
AZ CADI CAD 07/17/16 07/17/16 3 BA+1.080 % 4.205 % 200.6 200.6 C-011 CADI CAD 09/22/17 1/17/17 1.7.525 % 7.490 % 55.5 55.5 4L CADI CAD 07/17/17 11/17/17 2.250 % 6.250 % 220.0 220.0 DM CADI CAD 07/17/18 04/17/17 11/17/17 2.250 % 6.250 % 225.0 255.0 C132 CADI CAD 04/02/18 04/02/18 7.515 % 6.880 % 20.0 20.0 DM CADI CAD 07/17/18 04/02/18 7.515 % 6.880 % 20.0 20.0 DM CADI CAD 06/15/18 06/15/18 1.750 % 1.940 % 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7									
C-011 CADI CAD 09/22/17 09/22/17 7.525% 7.490% 5.55 5.55 5.55 4.1 CADI CAD 11/17/17 11/17/17 6.260% 6.250% 2.50.0 2.50.0 BM CADI CAD 01/15/18 01/15/18 3.BA + 3.280% 6.260% 2.55.0 2.55.0 H312-5FX CADI CAD 040/27/18 040/27/18 1.750% 1.940% 2.00.0 2.00.0 H312-5FX CADI CAD 09/15/18 09/15/18 1.750% 2.326% 4.2.0 4.2.0 GD CADI CAD 09/15/18 09/15/18 1.750% 2.326% 4.2.0 4.2.0 GD CADI CAD 09/15/18 09/15/18 1.850% 1.964% 100.0 100.0 GD-2 CADI CAD 09/15/18 09/15/18 3.BA + 0.253% 2.757% 100.0 100.0 GD-2 CADI CAD 09/15/18 09/15/18 9.500% 10.000% 2.28.4 2.28.4 BU USDI USD 12/10/18 12/20/18 9.500% 10.000% 2.28.4 2.28.4 BU USDI USD 12/20/18 12/20/18 9.500% 10.000% 3.5 3.5 3W CADI CAD 12/30/18 12/30/18 10.000% 10.000% 3.5 3.5 3W CADI CAD 20/11/20 02/11/20 6.927% 3.284% 50.0 50.0 CO77-2 CADI CAD 02/11/20 02/11/20 6.927% 3.284% 50.0 50.0 CO77-3 CADI CAD 02/11/20 02/11/20 6.927% 3.284% 50.0 50.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3 CADI CAD 05/15/20 05/15/20 7.312% 5.086% 100.0 100.0 CO77-3									
Heart CADICAD 11/17/17 11/17/17 6,260 % 6,260 % 20.0 20.0 20.0 C132 CADICAD 04/02/18 04/02/18 7,515 % 6,860 % 255.0									
BM									
C132 CAD/ CAD 04/02/18 04/02/18 7.515 % 6.891 % 200.0 200.0									
HB12-SFX									
HB12-SFL CADI CAD 06/15/18 06/15/18 1.750 % 2.326 % 42.0 42.0 GD CADI CAD 09/16/18 09/05/18 1.850 % 1.954 % 100.0 100.0 GD-1 CADI CAD 09/05/18 09/05/18 3.8 A+0.253 % 2.753 % 100.0 100.0 EE USDI CAD 09/15/18 09/15/18 9.500 % 10.000 % 228.4 228.4 BU USDI USD 12/01/18 12/01/18 9.525 % 10.411 % 200.0 232.0 33.7 24.00									
GD									
GD-1 CADI CAD 0906/18 0906/18 3 BA + 0.253 % 2.757 % 100.0 100.0 EE USDI CAD 0905/18 0906/18 3 BA + 0.253 % 2.757 % 100.0 100.0 EE USDI CAD 0905/18 0905/18 0905/18 9 SAD 4 0.253 % 2.757 % 100.0 100.0 SAD 4 228.									
GD-2 CADI CAD 0906/18 0906/18 0906/18 3 BA + 0.253 % 2.757 % 100.0 100.0									
EE									
BU									
3W CADI CAD 12/30/18 12/30/18 10.000 % 10.000 % 1.0								200.0	
3W CADI CAD 12/30/18 12/30/18 10,000 % 10,000 % 10,00 10,00							3.5		
GE-1 USD/ USD 03/15/20 06/01/18 5.853 % 7.299 % 10.0 174.0 10.0 174.0 17	3W	CAD/ CAD	12/30/18	12/30/18	10.000 %	10.000 %	1.0		1.0
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MANITOBA HYDRO Long Term Debt Maturity Schedule with Action and Swap Dates At December 31, 2014 (in millions \$; with USD/CAD of 1.1601 at December 31, 2014)

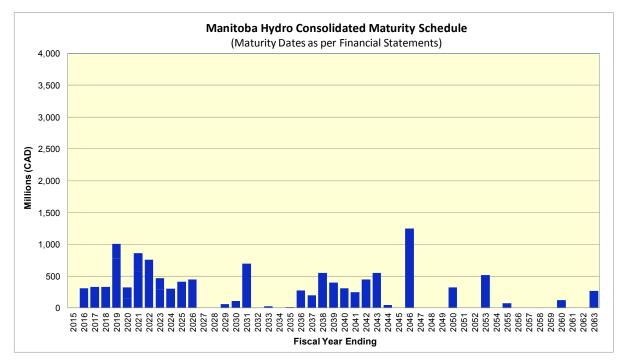
Underlying physical debt matures before linked swap

Debt	Currency	Maturity	Action	Coupon	Yield	Principal	Principal	Total Principal
Series	(Int/ Princ)	Date	Date	Rate	Rate	(CAD)	(USD)	(CAD)
PB-2	CAD/ CAD	03/05/38	03/05/38	4.600 %	4.759 %	300.0		300.0
C132-2A	CAD/ CAD	11/01/38	04/02/18	4.997 %	4.997 %	85.0		85.0
C132-2B	CAD/ CAD	11/01/38	04/02/18	4.927 %	4.927 %	19.0		19.0
C136-3	CAD/ CAD	11/01/38	09/05/29	5.058 %	5.058 %	31.0		31.0
C138-2	CAD/ CAD	11/01/38	05/15/20	4.897 %	4.897 %	50.0		50.0
C119-3C	CAD/ CAD	12/01/38	09/05/25	5.245 %	5.245 %	15.0		15.0
C119-3A	CAD/ CAD	12/01/38	09/05/25	5.245 %	5.245 %	50.0		50.0
C119-3B	CAD/ CAD	12/01/38	09/05/25	5.232 %	5.232 %	50.0		50.0
C136	CAD/ CAD	03/01/39	09/05/29	5.020 %	5.020 %	50.0		50.0
C136-2	CAD/ CAD	03/01/39	09/05/29	4.882 %	4.882 %	50.0		50.0
5C-4	CAD/ CAD	12/31/39	12/31/39	4.311 %	4.311 %	10.0		10.0
FK-2	CAD/ CAD	03/05/40	03/05/40	4.650 %	5.174 %	300.0		300.0
FR-2	CAD/ CAD	03/05/41	03/05/41	4.100 %	4.599 %	250.0		250.0
CO40	CAD/ CAD	03/05/42	03/05/42	3 BA + 0.179 %	3.604 %	50.0		50.0
FT	CAD/ CAD	03/05/42	03/05/42	4.492 %	4.492 %	400.0		400.0
GA	CAD/ CAD	03/05/43	03/05/43	3.350 %	3.413 %	300.0		300.0
GA-2	CAD/ CAD	03/05/43	03/05/43	3 350 %	4 311 %	250 0		250 0
CO68	CAD/ CAD	03/05/44	03/05/44	7.037 %	4.596 %	50.0		50.0
GG	CAD/ CAD	09/05/45	09/05/45	4.050 %	4.096 %	300.0		300.0
GG-2	CAD/ CAD	09/05/45	09/05/45	4.050 %	3.819 %	250.0		250.0
GG-3	CAD/ CAD	09/05/45	09/05/45	4.050 %	3.642 %	300.0		300.0
GG-4	CAD/ CAD	09/05/45	09/05/45	4.050 %	3.589 %	400.0		400.0
FN	CAD/ CAD	03/05/50	03/05/50	4.700 %	4.726 %	200.0		200.0
FN-2	CAD/ CAD	03/05/50	03/05/50	4.700 %	3.629 %	75.0		75.0
FN-3	CAD/ CAD	03/05/50	03/05/50	4.700 %	3.281 %	50.0		50.0
C129	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.178 %	50.0		50.0
C129-2	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.918 %	55.0		55.0
C129-3	CAD/ CAD	09/05/52	09/05/52	3.150 %	4.065 %	50.0		50.0
C129-4	CAD/ CAD	09/05/52	09/05/52	3.150 %	4.099 %	50.0		50.0
C129-5	CAD/ CAD	09/05/52	09/05/52	3.150 %	4.087 %	50.0		50.0
C129-6	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.906 %	50.0		50.0
C129-7	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.915 %	20.0		20.0
C129-8	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.895 %	20.0		20.0
C129-9	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.858 %	60.0		60.0
C129-10	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.786 %	50.0		50.0
C129-11	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.702 %	25.0		25.0
C129-12	CAD/ CAD	09/05/52	09/05/52	3.150 %	3.699 %	40.0		40.0
C139	CAD/ CAD	09/05/54	09/05/54	3.650 %	3.666 %	50.0		50.0
C139-2	CAD/ CAD	09/05/54	09/05/54	3.650 %	3.625 %	25.0		25.0
4Z	CAD/ CAD	06/09/57	06/09/57	7.100 %	7.100 %	7.0		7.0
C110	CAD/ CAD	03/05/60	03/05/60	5.200 %	4.629 %	125.0		125.0
C109	CAD/ CAD	03/05/63	03/05/63	4.625 %	4.638 %	50.0		50.0
C137	CAD/ CAD	03/05/63	03/05/63	3.450 %	3.496 %	50.0		50.0
C137-2	CAD/ CAD	03/05/63	03/05/63	3.450 %	3.887 %	25.0		25.0
C137-3	CAD/ CAD	03/05/63	03/05/63	3.450 %	4.019 %	37.0		37.0
C137-3	CAD/ CAD	03/05/63	03/05/63	3.450 %	3.868 %	60.0		60.0
C137-5	CAD/ CAD	03/05/63	03/05/63	3.450 %	3.354 %	50.0		50.0
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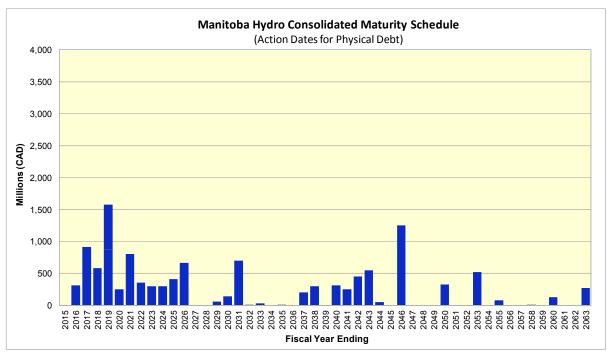
Note that some of the long term debt issues may be retired at their maturity. Manitoba Hydro will consider the availability of sinking fund withdrawals and surplus cash to reduce the required refinancing of maturing debt.

The Corporation's interest rate risk policy and guidelines consider debt maturities on a 12 month forward basis. For ease of comparison, the following chart depicts the volume of

financial statement debt maturities ("Maturity Dates") within each fiscal year.



The following chart depicts the volume of physical debt maturities ("Action Dates") within each fiscal year. As noted by DBRS on page 6 of their October 23, 2014 report on the Manitoba Hydro-Electric Board (see Appendix 3.8): "Manitoba Hydro maintains a relatively smooth maturity profile with potential volatility from foreign currency debt mostly mitigated through natural and cash flow hedges, and a moderate level of floating-rate debt (19% of floating-rate debt and 7% of long-term debt to be refinanced within a year), which adds stability to debt servicing costs and minimizes interest rate risk."





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Section:	Appendix 3.3 Appendix 11.41	Page No.:	Figure 13.1 page 17 Pages 2, 3 and 4 of 4					
Topic:	Financing expense							
Topic.	Tillaneing expense							
Subtopic:	Accuracy of 2 to 10 year interest rate forecasts for 10 Year +, and 90 day T-bill interest rates							
Issue:	Are "the proposed 3.95% rate increases" really "the minimum that are required to manage the deterioration in the Corporation's financial strength during the period of extensive investments" "Tab 3, page 1 line 35							

PREAMBLE TO IR (IF ANY):

In its letter to the PUB on February 4, Manitoba Hydro indicated that "... more weight should be afforded to reviewing the first 10 years of the financial forecast ..."

Consumers' Coalition observes in Appendix 3.3 in Figure 13-1 that Manitoba Hydro has provided a chart showing amounts of debt refinancing in fiscal years from 2015 to 2024.

Consumers' Coalition observes in Appendix 11.41 at page 4 of 4 that Manitoba Hydro has provided two charts showing amounts of debt maturing on the basis of "maturity dates as per financial statements" and on the basis of "action dates for physical debt".

In Appendix 3.3 Figure 13-1 appears to indicate approximately \$750 million of debt refinancing, while Appendix 11.41 appears to indicate approximately \$1,000 million of debt with "maturity dates as per financial statements" and approximately \$1,500 million of debt with a 2019 "action" date.

In Appendix 3.3 Manitoba Hydro identifies a policy that applies to "fixed rate debt to be refinanced" within a 12 month period.

2015 03 12 Page 1 of 6



QUESTION:

- a) To allow a more precise understanding of the data in the 2 charts on page 4 of 4 in Appendix 11.41, please reproduce the charts after reducing the CAD dollar axis range to span zero to 2 billion.
- b) Please reconcile the debt instruments in the approximate \$750 million of the debt instruments in Figure 13.1 to be refinanced in 2019, to the \$1,000 million of debt with "maturity dates as per financial statements" in 2019 in Appendix 11.41, and approximately \$1,500 million of debt with a 2019 "action" date.
- c) Please define "debt to be refinanced" as it is used in describing the policy on page 17 of Appendix 3.3, and contrast that term with debt with "maturity dates as per financial statements".
- d) Please contrast the concept of "debt to be refinanced", as it is used in describing the policy on page 17 of Appendix 3.3, with debt with an "action" date. Does the defination of an action date exclude a maturity date.
- e) If debt initially issued with a floating rate interest obligation, and at some an "action" date could be used at the basis for a long term floating to fixed rate interest swap, should that not be treated as "fixed rate debt to be refinanced"
- f) For the approximate \$250 million of the debt instruments with "maturity dates as per financial statements" in 2019 in Appendix 11.41 not included in the \$750 million of the debt instruments in Figure 13.1 to be refinanced in 2019, please explain in what way, if any, their treatment in the forecast differs from a debt instrument to be refinanced at either floating or long term fixed rates.
- g) For the approximate \$500 million of the debt instruments with a 2019 "action" date not included in the "maturity dates as per financial statements" in 2019 in Appendix 11.41 not included in the \$1,000 million of debt with "maturity dates as per financial statements" in 2019 in Appendix 11.41, please explain in what way, if any, their treatment in the forecast differs from a debt instrument to be refinanced at either floating or long term fixed rates.

RATIONALE FOR QUESTION:

Seeks clarification on issues important to the financial forecast and rates.

2015 03 12 Page 2 of 6

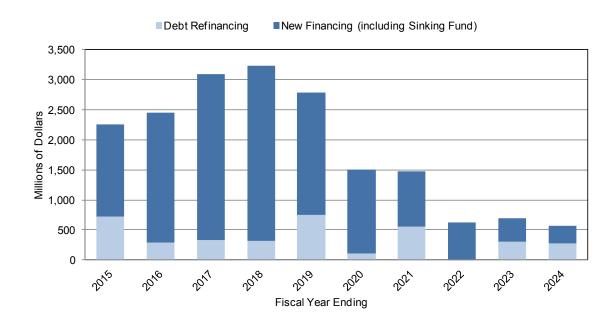
RESPONSE:

The following answer is the response to COALITION/MH-I-109(a)-(g):

The projected consolidated borrowing requirements chart shown in IFF14 (Appendix 3.3, Figure 13.1) and the two debt maturity charts shown in Appendix 11.41 differ due to:

- a) varying cutoff dates (the IFF14 chart is at October 31, 2014 while the Appendix 11.41 charts are at December 31, 2014);
- b) the IFF14 chart is net of sinking fund withdrawals while the Appendix 11.41 charts depicts long term debt maturities before any sinking fund withdrawals; and
- c) the second chart in Appendix 11.41 depicts the portfolio's long term debt maturities at the earliest action dates for a debt series

The IFF14 chart, depicting the projected consolidated borrowing requirements, is as follows:



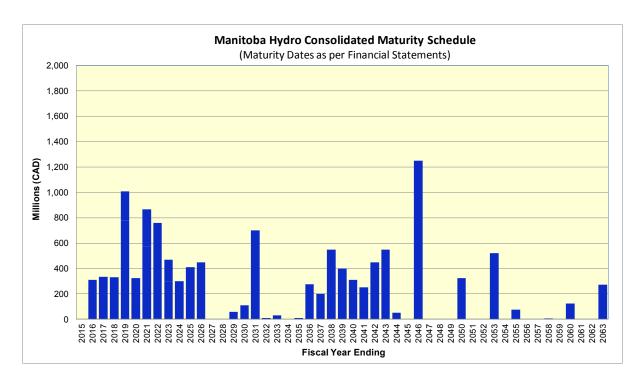
As described in Appendix 11.41, in accordance with accounting standards, the Corporation's financial statement presentation for debt maturities specifies the most outward obligation dates on any debt series (the latter of physical debt or forward interest rate swap maturity dates). This financial statement presentation is also adopted for the IFF. The IFF14 chart (with an October 31, 2014 cutoff date) also shows the forecasted debt refinancings net of

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forecasted sinking fund withdrawals. New financings include forecasted cash requirements to fund sinking fund contributions.

The total debt requirements for Manitoba Hydro's electric operations in the next five year period will peak at levels in excess of \$3 billion per year. The debt maturity charts depicted in Appendix 11.41 had the vertical axis extended to \$4 billion Canadian dollars (CAD) in order to provide a similar context to this IFF14 chart. As requested, the following charts from Appendix 11.41 have been depicted with the vertical axis up to \$2 billion CAD.

The first chart in Appendix 11.41, subtitled "Maturity Dates as per Financial Statements", depicted the long term debt maturities (at December 31, 2014) in accordance with financial statement presentation and before any sinking fund withdrawals.



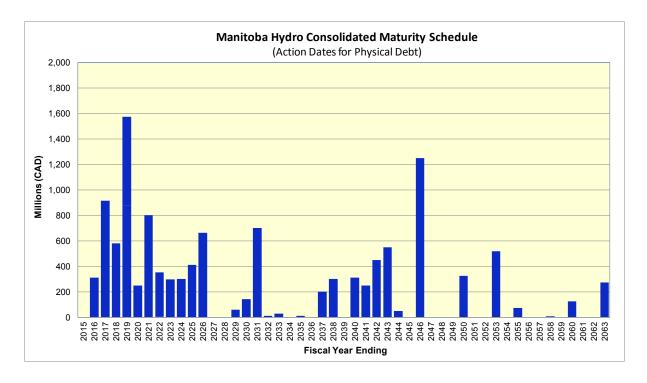
Unlike the IFF14 chart, the charts in Appendix 11.41 were depicting debt maturities and not forecasted debt refinancings. For the 2018/19 fiscal year, the \$1,008 million of debt maturities in the first Appendix 11.41 chart are \$260 million higher than the \$748 million refinancing amounts in the IFF14 chart in Figure 13.1 due to the projected \$460 million sinking fund withdrawal for debt series EE and BU in 2018/19 (as valued at December 31, 2014), and less the \$200 million underlying refinancing of debt series FC-3 that occurred between the October 31, 2014 IFF14 cutoff date and the December 31, 2014 dating for the

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Appendix 11.41 charts (FC-3 had a December 3, 2014 action date and the debt streams now have later maturity dates than the June 2, 2018 swap maturity date).

The second chart from Appendix 11.41, subtitled "Action Dates for Physical Debt", depicted the long term debt maturities of the physical debt within the debt portfolio (at December 31, 2014), including cases where the maturity of underlying physical debt is before the maturity of the linked forward interest rate swap for a debt series.



For the 2018/19 fiscal year, the \$1,576 million debt maturities in the action date chart is \$568 million CAD higher than the \$1,008 million debt maturities in the first Appendix 11.41 chart due to the 2018/19 maturity of underlying physical debt on debt series C132-2A, C132-2B, GE-1, GE-2 and GE-3. If existing floating rate debt is used as underlying debt for a fixed interest rate swap, then the floating rate debt would be reclassified as fixed rate debt at the linked date. Although, debt series with linked interest rate swaps are subject to some interest rate risk in cases where the maturity of underlying physical debt is before the maturity of the linked forward interest rate swap for a debt series, the IFF assumes that debt terms on existing forward interest rate swaps will remain constant until their swap maturity dates.

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Manitoba Hydro's interest rate risk policy and guidelines (see Appendix 3.3 page 17, or Appendix 3.7 page 9) are applicable to the existing debt portfolio. Although some of the long term debt issues may be retired at their maturity in accordance with the availability of sinking fund withdrawals and surplus cash, to be prudent and risk adverse, the policy and guideline measures consider the maximum interest rate exposure on the existing debt portfolio, and therefore assumes that all long term debt will be refinanced at their action and maturity dates.

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Finance Expense-Debt Levels MFR 8

A schedule detailing the current refinancing plans, the weighted average term of outstanding debt, the principle amount and proportions of debt maturing in 10 years, 20 years and greater than 20 years.

The following schedule provides the principal amount of debt outstanding at fiscal year end, as well as the relative proportion of debt maturing within specific time frames and the weighted average term to maturity of the total long term debt portfolio. Actuals were provided at March 31 for the fiscal years ended 2004 – 2014, with IFF14 forecasted year end figures to March 31, 2017.

Note that the schedule was prepared using debt maturities conforming to the Corporation's financial statement presentation, which in accordance with accounting standards specify the most outward obligation dates on any debt series (the latter of physical debt or forward interest rate swap maturity dates). Also note that the forecasted debt percentages and weighted average terms to maturity will be affected by the simplying forecast modeling assumption of a 20 year term to maturity for all new debt issuance. For example, this forecast assumption leads to a disproportionate forecasted percentage of the debt portfolio being shown as maturing between 10 - 20 years from the depicted fiscal year end. Actual terms to maturity for new debt issuance will vary from forecast, and the distribution of the future transacted debt issuance will continue to have a combination of short, medium and long term maturities. See the Debt Management Strategy in Appendix 3.7 for additional information regarding the Corporation's debt financing requirements and strategies.

MANITOBA HYDRO

Finance Expense - Debt Levels MFR 8

Actuals are shown for March 31, 2004 - 2014; with forecast information shown for March 31, 2015 - 2017. (\$ in CAD millions)

	Debt Maturing Less than 10 Years		Debt Maturing Between 10 - 20 Years			laturing an 20 Years	Total Long Term Debt	Weighted Average Term to Maturity
	\$	% of Total	\$	% of Total	\$	% of Total	\$	(Years)
March 31, 2004	2,586	35.1 %	3,521	47.7 %	1,268	17.2 %	7,375	13.8
March 31, 2005	2,377	33.1 %	3,346	46.5 %	1,468	20.4 %	7,191	13.8
March 31, 2006	2,397	33.5 %	3,317	46.3 %	1,443	20.2 %	7,158	13.7
March 31, 2007	2,623	36.3 %	3,094	42.9 %	1,501	20.8 %	7,218	12.9
March 31, 2008	2,996	39.5 %	2,513	33.1 %	2,081	27.4 %	7,590	13.5
March 31, 2009	3,763	45.8 %	2,026	24.7 %	2,421	29.5 %	8,209	13.6
March 31, 2010	3,963	46.0 %	1,805	<mark>21.0 %</mark>	2,846	33.0 %	8,614	14.8
March 31, 2011	3,967	45.6 %	2,241	25.7 %	2,496	28.7 %	8,704	15.3
March 31, 2012	4,841	51.4 %	1,619	17.2 %	2,962	31.4 %	9,422	14.9
March 31, 2013	5,179	51.7 %	1,499	15.0 %	3,332	33.3 %	10,010	14.8
March 31, 2014	5,160	46.9 %	1,500	13.6 %	4,349	39.5 %	11,009	16.2
March 31, 2015 *	5,028	41.4 %	1,520	12.5 %	5,609	46.1 %	12,157	17.6
March 31, 2016 *	5,194	36.4 %	3,745	26.2 %	5,334	37.4 %	14,273	17.4
March 31, 2017 *	4,860	28.4 %	7,145	<mark>41.7 %</mark>	5,134	30.0 %	17,139	17.3

^{*} The forecasted debt percentages and weighted average terms to maturity will be affected by the simplifying modeling assumption of a 20 year term to maturity for all new debt issuance. Actual terms to maturity will vary from forecast.



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Section:	Appendix 3.1 Appendix 3.4	Page No.:	Page A-1 Fiscal Year Basis Page 1 of 6				
Topic:	Financing expense						
Subtopic:	Accuracy of 2 to 10 year interest rate forecasts for 10 Year +, and 90 day T-bill interest rates						
Issue:	Are "the proposed 3.95% rate increases" really "the minimum that are required to manage the deterioration in the Corporation's financial strength during the period of extensive investments" "Tab 3, page 1 line 35						

PREAMBLE TO IR (IF ANY):

In its letter to the PUB on February 4, Manitoba Hydro indicated that "... more weight should be afforded to reviewing the first 10 years of the financial forecast ..."

Consumers' Coalition observes in Appendix 3.4, page 1 of 6, that financing expense is the largest expense in Electrical operations in fiscal 2017 and is by 2022 is forecast to be greater than the sum of the next two expenses categories, operations and depreciation.

Consumers' Coalition observes that the 90 day T-bill interest rate forecasts in many recent years have forecast materially higher interest rates than those that actually occurred, and believes that this overstates the financial burdens to be faced by Manitoba Hydro, in past and current forecasts.

Consumers' Coalition has prepared the table below to attempt to quantify the error in forecasting of 90 day T-bill interest rate from data found in Economic Outlooks for 2006, 2007, 2009, 2010, 2011, 2012, 2013 and 2014. At the time this question was being prepared, Consumers' Coalition was unable to find a 2008 Economic Outlook. To allow for the final period comparison for each forecast, as there are approximately 6 weeks remaining in the fiscal year, Consumers' Coalition has estimated 0.89% as the 2014/15 actual value using the available Bank of Canada data series V39065 for the period April 1, 2014 to February 12, 2015. See cell 2014/15, in the row "Actual".

To assist in understanding the table, the 2011 first year error of 0.69% is calculated by subtracting the actual 2012 0.91% value from the forecast of 1.60%. The 8th year 2006

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forecast error of 3.56% is calculated by subtracting the actual 2014 value of 0.94% from the 4.5% forecast for 2014.

90 Day T-bill	2006	2007	2008	2009	2010	2011	2012	2013	2014
Fiscal year	2007	2008	2009	2010	2011	2012	2013	2014	2015
2006	4.00%	4.05%	4.25%	4.25%	4.30%	4.50%	4.50%	4.50%	4.50%
2007		4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%
2008									
2009				0.80%	1.90%	3.80%	4.20%	4.25%	4.25%
2010					0.95%	2.50%	3.10%	3.65%	4.10%
2011						1.60%	2.80%	4.45%	3.80%
2012							1.00%	1.45%	2.95%
2013								1.05%	1.45%
2014									1.00%
Actual	4.16%	3.83%	1.84%	0.22%	0.78%	0.91%	0.97%	0.94%	0.89%
Error	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year
2006	-0.16%	0.22%	2.41%	4.03%	3.52%	3.59%	3.53%	3.56%	3.61%
2007	0.42%	2.41%	4.03%	3.47%	3.34%	3.28%	3.31%	3.36%	
2008									
2009	0.58%	1.12%	2.89%	3.23%	3.31%	3.36%			
2010	0.17%	1.59%	2.13%	2.71%	3.21%				
2011	0.69%	1.83%	3.51%	2.91%					
2012	0.03%	0.51%	2.06%						
2013	0.11%	0.56%							
2014	0.11%								
Avg error	0.24%	1.18%	2.84%	3.27%	3.35%	3.41%	3.42%	3.46%	3.61%
Avg Forecast	1.83%	2.63%	3.80%	4.03%	4.23%	4.33%	4.38%	4.38%	4.50%
Error/AvgFcst	13%	45%	75%	81%	79%	79%	78%	79%	80%

The average forecast is calculated using forecasts for periods of equal distance from the date of the forecast date. For the 2 year average, they include the second left side value in each row, from 4.05% for the 2006 forecast through to 1.45% for the 2013 forecast. For the 7 year value the average forecast includes the 2006 forecast for the 2012/13 fiscal year of 4.50% and the 2007 forecast for the 2013/14 fiscal year of 4.25% and would include the 2008 forecast for the 2014/15 fiscal year, had that forecast been available at the time of the calculation. The average error to average forecast is calculated by division.

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QUESTION:

- a) Please confirm that the data points extracted from the 2006, 2007 and 2009 through 2014 Economic Outlooks are correct for each of the fiscal periods or supply the corrected value for any erroneous data points.
- c) Please update the table to incorporate the 2008 Economic Outlook 90 day T-bill interest rate forecasts, and provide the error calculation, using the methodology applied to develop the other fiscal year forecast error numbers.
- g) To assist the Board in understanding the financial magnitude of the errors of forecasting of 90 day T-bill rates, please provide a table setting out the short term, floating rate long term debt, and fixed rate long term debt, in dollars and in percentage of total debt, for the 2012/13 and 2013/14 year ends, and the forecast year ends up to and including 2023/24.

RATIONALE FOR QUESTION:

The question goes to alleged forecast bias of an important element of the rate.

RESPONSE:

This information request's preamble, question and rationale make an unfounded allegation that Manitoba Hydro's interest rate forecasting methodology is biased and that it overstates the burdens to be faced by Manitoba Hydro in past and current forecasts. The information request also makes the supposition that the Corporation's only financial exposure to changing economic conditions is through changing interest rates and their potential impact on the Corporation's gross interest expense. These allegations and suppositions are false.

As Manitoba Hydro has stated in response to PUB/MH-I-10b, Manitoba Hydro operates in a complex economic environment that simultaneously affects many parts of its operations. The economy's impact on Manitoba Hydro's revenue requirement is not exclusively seen through changing interest rates and the evolving views of Manitoba Hydro's external interest rate forecasters. There are numerous counterbalances.

Forecast variances are a function of changing economic conditions, and not as a result of the methodology whereby Manitoba Hydro gathers its externally produced forecasts. Manitoba Hydro's interest rate forecast is unbiased, as it is not developed with the intent of selecting or

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encouraging one outcome over others. Forecaster opinions do change through time in response to changing market conditions. Although economic forecasts during the last few years have generally called for a quicker economic recovery and correspondingly higher interest rates, on an actual basis, the strength and pace of a recovery has been subdued. As the external forecasts have evolved through time, the Corporation's interest rate forecasting methodology has gathered and combined their opinions in an unbiased manner. The existing forecasting methodology provides a representative interest rate forecast at the time that it is produced. To remain current to changing conditions, the Corporation monitors financial markets on an ongoing basis, and reviews its interest rate forecasts at regular intervals throughout the year.

These regular updates to the interest rate forecast provide assurance that Manitoba Hydro's ratepayers will not be burdened by deviations from the long-term interest rate forecast. Manitoba Hydro's rates are set under a rigorous cost of service methodology (and not a ratebase rate of return approach), where the retained earnings and net income of Manitoba Hydro are held for the benefit of ratepayers. To the extent that interest costs are higher or lower than forecast, the difference, along with all other differences, flows to retained earnings. Retained earnings are not distributed as dividends to private shareholders (as may be the case in jurisdictions with a rate-base rate of return methodology) or used for any purpose other than managing the risks and revenue requirements on behalf of Manitoba Hydro's customers. To the extent that there are higher contributions to retained earnings as a result of this difference, there will be lower future rate increase requirements. Manitoba Hydro views this self-correcting mechanism at each GRA to be no different than the impact on earnings of weather or any other revenue or expense variable.

In the preamble, the Coalition prepared a table that attempted to quantify the forecast interest rate variances. The forecast variances are self-correcting at each GRA along with other counterbalancing factors and updates. As requested, Manitoba Hydro has provided the 2008 Economic Outlook data and reviewed the data points extracted from the 2006, 2007 and 2009 through 2014 Economic Outlooks. Note that the 2013/14 value in the 2011 forecast should be 3.45%, rather than 4.45%. Also note that the values reported in the Economic Outlooks are published in the spring of every year are not always the basis of the relevant year's IFF or revenue requirement.

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90 Day T-bill	2006	2007	2008	2009	2010	2011	2012	2013	2014
Fiscal year	2007	2008	2009	2010	2011	2012	2013	2014	2015
2006	4.00%	4.05%	4.25%	4.25%	4.30%	4.50%	4.50%	4.50%	4.50%
2007		4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%
2008			3.40%	3.95%	4.50%	4.50%	4.50%	4.50%	4.50%
2009				0.80%	1.90%	3.80%	4.20%	4.25%	4.25%
2010					0.95%	2.50%	3.10%	3.65%	4.10%
2011						1.60%	2.80%	3.45%	3.80%
2012							1.00%	1.45%	2.95%
2013								1.05%	1.45%
2014									1.00%
Actual	4.16%	3.83%	1.84%	0.22%	0.78%	0.91%	0.97%	0.94%	0.89%
									9
Variance	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	Year
2006	-0.16%	0.22%	2.41%	4.03%	3.52%	3.59%	3.53%	3.56%	3.61%
2007	0.42%	2.41%	4.03%	3.47%	3.34%	3.28%	3.31%	3.36%	
2008	1.56%	3.73%	3.72%	3.59%	3.53%	3.56%			
2009	0.58%	1.12%	2.89%	3.23%	3.31%	3.36%			
2010	0.17%	1.59%	2.13%	2.71%	3.21%				
2011	0.69%	1.83%	3.51%	2.91%					
2012	0.03%	0.51%	2.06%						
2013	0.11%	0.56%							
2014	0.11%								
Avg variance	0.39%	1.18%	2.84%	3.27%	3.35%	3.41%	3.42%	3.46%	3.61%
Avg Forecast	2.01%	2.79%	3.76%	4.11%	4.28%	4.38%	4.42%	4.38%	4.50%
Variance/AvgFcst	19%	42%	76%	80%	78%	78%	77%	79%	80%

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As requested in part g) of this Information Request, the following schedule provides Manitoba Hydro's actual and forecasted proportions of short term debt, floating rate long term debt, and fixed rate long term debt at March 31, 2013 – 2024.

Consolidated Debt Portfolio Summary

(By proportion of short term debt, floating rate long term debt, and fixed rate long term debt)

Actuals are to December 31, 2014; with forecast information for March 31, 2015 - 2024 (\$ in CAD millions)

Fiscal Year Ending	Short T	erm Debt		ng Rate erm Debt	Fixe Long T	Total Debt	
Enaing	\$	% of Total	\$	% of Total	\$	% of Total	\$
March 31, 2013	-	0.0 %	1,604	16.0 %	8,406	84.0 %	10,010
March 31, 2014	ı	0.0 %	2,127	19.3 %	8,881	80.7 %	11,009
March 31, 2015 *	83	0.7 %	1,812	14.8 %	10,345	84.5 %	12,240
March 31, 2016 *	142	1.0 %	1,995	13.8 %	12,278	85.2 %	14,415
March 31, 2017 *	55	0.3 %	2,311	13.4 %	14,828	86.2 %	17,194
March 31, 2018 *	111	0.6 %	2,696	13.4 %	17,312	86.0 %	20,120
March 31, 2019 *	134	0.6 %	3,374	15.5 %	18,235	83.9 %	21,743
March 31, 2020 *	74	0.3 %	3,541	15.4 %	19,329	84.2 %	22,944
March 31, 2021 *	7	0.0 %	3,661	15.5 %	19,959	84.5 %	23,627
March 31, 2022 *	40	0.2 %	3,781	16.1 %	19,720	83.8 %	23,542
March 31, 2023 *	145	0.6 %	3,440	14.5 %	20,200	84.9 %	23,786
March 31, 2024 *	152	0.6 %	3,560	14.8 %	20,380	84.6 %	24,092

^{*} The forecasted debt percentages will be affected by the simplifying modeling assumption of a 20 year term to maturity for all new debt issuance. Actual terms to maturity will vary from forecast.

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Finance Expense-Debt Levels MFR 6

Term sheets related to long term debt issued in the last two fiscal years.

The attached information provides the terms for Manitoba Hydro's actual new and amended long term debt financings for fiscal years 2012/13, 2013/14 and 2014/15 up to December 31, 2014. See Finance Expense – Debt Levels MFR 7 for a complete summary listing of the entire debt portfolio at December 31, 2014.

Terms for New and Amended Long Term Debt

(April 1, 2012 to December 31, 2014)

The terms for Manitoba Hydro's new and amended long term debt financings are provided for fiscal years 2012/13, 2013/14 and 2014/15 (up to December 31, 2014).

2012/13 Total long term financings for the year were CAD \$1,300 million, made up of:

- \$754.9 million for new borrowing requirements.
- \$41.1 million to refinance maturing long term debt.
- \$504.0 million to refinance maturing underlying debt issues associated with ongoing interest rate swaps.

The actual long term debt financings undertaken during this fiscal year, per quarter, were as follows:

- **Quarter 1** On June 5, 2012, Manitoba Hydro secured long term debt series **GA** for CAD \$300 million and a March 5, 2043 maturity date. GA was issued at a discount with proceeds of \$296.4 million (net of commissions), a fixed rate coupon of 3.350%, and an all-in-yield of 3.413%. The debt was issued to finance new borrowing requirements.
- **Quarter 2** On July 12, 2012, Manitoba Hydro secured long term debt series **FN-3** for CAD \$50 million and a March 5, 2050 maturity date. FN-3 was issued at a premium with proceeds of \$65.3 million (net of commissions), a fixed rate coupon of 4.700%, and an all-in-yield of 3.281%. The debt was issued to finance new borrowing requirements.

On July 31, 2012, Manitoba Hydro secured long term debt series **C129** for CAD \$50 million and a September 5, 2052 maturity date. C129 was issued at a discount with proceeds of \$49.7 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in-yield of 3.178%. The debt was issued to finance new borrowing requirements.

On September 6, 2012, Manitoba Hydro secured long term debt series \mathbf{GC} for USD \$300 million and a September 6, 2022 maturity date. The issue was swapped to CAD \$296.4 million and a floating rate coupon of 3 month BA + 0.499%. The debt was issued to finance new borrowing requirements.

Quarter 3 On December 3, 2012, Manitoba Hydro secured long term debt series C132 for CAD \$200 million and an April 2, 2018 maturity date. The debt, which was swapped to floating rate debt, was issued to refinance debt series ER-1 (\$200 million). A forward fixed interest rate swap that was previously linked to debt series ER-1 was re-linked to the C132 underlying refinancing, which amended the fixed rate on the debt stream to 7.515%.

Quarter 4 On January 22, 2013, Manitoba Hydro secured long term debt series C132-2 for CAD \$104 million and an April 2, 2018 maturity date. The debt, which was swapped to floating rate debt, was issued to refinance debt series C125-1 (\$85 million) and C125-2 (\$19 million). Forward fixed interest rate swaps that were previously linked to debt series C125-1 and C125-2 were re-linked to the C132-2 underlying refinancing, which amended the fixed rate on the debt streams to 4.997% (C132-2A) and 4.927% (C132-2B).

On March 13, 2013, Manitoba secured long term debt series GD for CAD \$300 million and a September 5, 2018 maturity date. The first \$100 million of the debt (GD) was issued to partially refinance debt series ER-2 (\$41.1 million), with the remaining \$58.9 million to finance new borrowing requirements. GD was issued at a discount with proceeds of \$99.46 million (net of commissions), a fixed rate coupon of 1.850%, and an all-in yield of 1.954%. The residual \$200 million of the debt, which was swapped to floating rate debt, was issued to refinance debt series C112-1 (\$100 million) and C112-2 (\$100 million). Forward fixed interest rate swaps that were previously linked to debt series C112-1 and C112-2 were re-linked to the GD underlying refinancing, which amended the fixed rate on the debt streams to 5.598% (GD-1) and 5.643% (GD-2). Following the maturity of the GD-1 and GD-2 interest rate swaps on September 16, 2013, these debt issues reverted to floating rate debt at a coupon rate of 3 month BA + 0.253% until the September 5, 2018 maturity date.

2013/14 Total long term financings for the year were CAD \$1,951.7 million, made up of:

- \$1,195.4 million for new borrowing requirements.
- \$250.4 million to refinance maturing debt.
- \$505.9 million to refinance maturing underlying debt issues associated with ongoing interest rate swaps.

The actual long term debt financings undertaken during this fiscal year, per quarter, were as follows:

Quarter 1 On April 2, 2013, Manitoba Hydro secured long term debt series GE for USD \$400 million (CAD equivalent \$405.9 million) and a June 1, 2018 maturity date. The debt, which was swapped to floating rate debt, was issued to refinance debt series FO-1 (USD \$150 million), FO-2 (USD \$203.1 million) and FO-3 (USD \$46.9 million). Forward fixed interest rate swaps that were previously linked to debt series FO-1, FO-2 and FO-3 were re-linked to the GE underlying refinancing, which amended the fixed rate on the debt streams to 5.853% (GE-1), 6.901% (GE-2) and 6.901% (GE-3).

On June 10, 2013, Manitoba Hydro secured long term debt series **C137** for CAD \$50 million and a March 5, 2063 maturity date. C137 was issued at a discount with proceeds of \$49.5 million (net of commissions), a fixed rate coupon of 3.450%, and an all-in yield of 3.496%. The debt was issued to finance new borrowing requirements.

On June 15, 2013, Manitoba Hydro secured **HydroBonds Series 12** for new borrowing requirements. Estate redemptions are processed on all HydroBonds as necessary and the floating rate HydroBonds are subject to redemptions on an annual basis. HydroBonds were issued at par with proceeds of \$128.3 million (net of commissions) as follows:

5 Year Floating Rate, June 15, 2018 maturity date \$124.4 million 3 Year Fixed Rate, June 15, 2016 maturity date \$3.1 million 5 Year Fixed Rate, June 15, 2018 maturity date \$0.7 million

Quarter 2 On July 29, 2013, Manitoba Hydro secured long term debt series **C129-2** for CAD \$55 million and a September 5, 2052 maturity date. C129-2 was issued at a discount with proceeds of \$46.6 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.918%. The debt was issued to finance new borrowing requirements.

On July 30, 2013, Manitoba Hydro secured long term debt series **C137-2** for CAD \$25 million and a March 5, 2063 maturity date. C137-2 was issued at a discount with proceeds of \$22.6 million (net of commissions), a fixed rate coupon of 3.450%, and an all-in yield of 3.887%. The debt was issued to finance new borrowing requirements.

On September 18, 2013, Manitoba Hydro secured long term debt series **GA-2** for CAD \$250 million and a March 5, 2043 maturity date. GA-2 was issued at a discount with proceeds of \$210.1 million (net of commissions), a fixed rate coupon of 3.350%, and an all-in yield of 4.311%. The debt was issued to finance new borrowing requirements.

On September 30, 2013, Manitoba Hydro secured long term debt series **C137-3** for CAD \$37 million and a March 5, 2063 maturity date. C137-3 was issued at a discount with proceeds of \$32.5 million (net of commissions), a fixed rate coupon of 3.450%, and an all-in yield of 4.019%. The debt was issued to finance new borrowing requirements.

Quarter 3 On October 10, 2013, Manitoba Hydro secured long term debt series **GG** for CAD \$300 million and a September 5, 2045 maturity date. GG was issued at a discount with proceeds of \$297.6 million (net of commissions), a fixed rate coupon of 4.050%, and an all-in yield of 4.096%. The debt was issued to finance new borrowing requirements.

On November 26, 2013, Manitoba Hydro secured long term debt series **GF** for CAD \$300 million and a June 2, 2023 maturity date. GF was issued at a discount with proceeds of \$279.5 million (net of commissions), a fixed rate coupon of 2.550%, and an all-in yield of 3.398%. The first \$49.6 million of the debt was issued to finance new borrowing requirements. The residual \$250.4 million was issued to refinance debt series EZ-3 (\$174.6 million), HydroBonds (\$60.9 million), 5B (\$6.9 million), 3W (\$1 million), 3X (\$5 million), and 3Y (\$2 million).

On November 29, 2013, Manitoba Hydro secured long term debt series **C135** for CAD \$100 million and an April 2, 2019 maturity date. The debt, which was a floating rate note, was issued to refinance debt series EZ-2 (\$54 million) and

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EZ-5 (\$46 million). Forward fixed interest rate swaps that were previously linked to debt series EZ-2 and EZ-5 were re-linked to the C135 underlying refinancing which amended the fixed rate on the debt stream to 4.801%.

On December 6, 2013, Manitoba Hydro secured long term debt series **C129-3** for CAD \$50 million and a September 5, 2052 maturity date. C129-3 was issued at a discount with proceeds of \$41.1 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 4.065%. The debt was issued to finance new borrowing requirements.

On December 17, 2013, Manitoba Hydro secured long term debt series **C129-4** for CAD \$50 million and a September 5, 2052 maturity date. C129-4 was issued at a discount with proceeds of \$40.8 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 4.099%. The debt was issued to finance new borrowing requirements.

On December 23, 2013, Manitoba Hydro secured long term debt series **C129-5** for CAD \$50 million and a September 5, 2052 maturity date. C129-5 was issued at a discount with proceeds of \$40.9 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 4.087%. The debt was issued to finance new borrowing requirements.

Quarter 4 On February 12, 2014, Manitoba Hydro secured long term debt series **C129-6** for CAD \$50 million and a September 5, 2052 maturity date. C129-6 was issued at a discount with proceeds of \$42.5 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.906%. The debt was issued to finance new borrowing requirements.

On February 18, 2014, Manitoba Hydro secured long term debt series **C129-7** for CAD \$20 million and a September 5, 2052 maturity date. C129-7 was issued at a discount with proceeds of \$17.0 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.915%. The debt was issued to finance new borrowing requirements.

On February 19, 2014, Manitoba Hydro secured long term debt series **C129-8** for CAD \$20 million and a September 5, 2052 maturity date. C129-8 was issued at a discount with proceeds of \$17.0 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.895%. The debt was issued to finance new borrowing requirements.

On February 20, 2014, Manitoba Hydro secured long term debt series **C137-4** for CAD \$60 million and a March 5, 2063 maturity date. C137-4 was issued at a discount with proceeds of \$54.5 million (net of commissions), a fixed rate coupon of 3.450%, and an all-in yield of 3.868%. The debt was issued to finance new borrowing requirements.

Total long term financings for the year to date are CAD \$2,072.6, made up of: 2014/15

- \$1,108.5 million for new borrowing requirements.
- \$583.1 million to refinance maturing long term debt.
- \$381.0 million to refinance maturing underlying debt issues associated with ongoing interest rate swaps.

The actual long term debt financings undertaken during this fiscal year, per quarter, were as follows:

Quarter 1 On April 10, 2014, Manitoba Hydro secured long term debt series C136 for CAD \$50 million and a September 5, 2029 maturity date. The debt, which was swapped to floating rate debt, was issued to partially refinance debt series FS-2C (\$100 million). A forward fixed interest rate swap that was previously linked to debt issue FS-2C was re-linked to the C136 underlying refinancing, which amended the fixed rate on \$50 million of the debt stream to 5.020%.

> On April 14, 2014, Manitoba Hydro secured long term debt series C136-2 for CAD \$50 million and a September 5, 2029 maturity date. The debt, which was swapped to floating rate debt, was issued to partially refinance debt series FS-2C (\$100 million). A forward fixed interest rate swap that was previously linked to debt series FS-2C was re-linked to the C136-2 underlying refinancing, which amended the fixed rate on \$50 million of the debt stream to 4.882%.

> On April 14, 2014, Manitoba Hydro secured long term debt series C129-9 for CAD \$60 million and a September 5, 2052 maturity date. C129-9 was issued at a discount with proceeds of \$51.5 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.858%. The debt was issued to finance new borrowing requirements.

> On April 14, 2014, Manitoba Hydro secured long term debt series C138 for CAD \$200 million and a May 15, 2020 maturity date. The debt, which was a floating rate note, was issued to refinance debt series FS-2A (\$100 million) and FS-2B (\$100 million). Forward fixed interest rate swaps that were previously linked to debt series FS-2A and FS-2B were re-linked to the C138 underlying refinancing, which amended the fixed rate on the debt streams to 7.312% (C138-A) and 7.443% (**C138-B**).

> On April 15, 2014, Manitoba Hydro secured long term debt series C136-3 for CAD \$31 million and a September 5, 2029 maturity date. The debt, which was swapped to floating rate debt, was issued to partially refinance debt series FS-2D (\$81 million). A forward fixed interest rate swap that was previously linked to debt series FS-2D was re-linked to the C136-3 underlying refinancing, which amended the fixed rate on \$31 million of the debt stream to 5.058%.

> On April 23, 2014, Manitoba Hydro secured long term debt series C129-10 for CAD \$50 million and a September 5, 2052 maturity date. C129-10 was issued at a discount with proceeds of \$43.6 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.786%. The debt was issued to finance new borrowing requirements.

> On April 30, 2014, Manitoba Hydro secured long term debt series GG-2 for CAD \$250 million and a September 5, 2045 maturity date. GG-2 was issued at a premium with proceeds of \$260.5 million (net of commissions), a fixed rate



coupon of 4.050%, and an all-in yield of 3.819%. The debt was issued to finance new borrowing requirements.

On May 5, 2014, Manitoba Hydro secured long term debt series **C138-2** for CAD \$50 million and a May 15, 2020 maturity date. The debt, which was a floating rate note, was issued to partially refinance debt series FS-2D (\$81 million). A forward fixed interest rate swap that was previously linked to debt series FS-2D was re-linked to the C138-2 underlying refinancing, which amended the fixed rate on \$50 million of the debt stream to 4.897%.

On June 9, 2014, Manitoba Hydro secured long term debt series **C129-11** for CAD \$25 million and a September 5, 2052 maturity date. C129-11 was issued at a discount with proceeds of \$22.2 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.702%. The debt was issued to finance new borrowing requirements.

On June 10, 2014, Manitoba Hydro secured long term debt series **C129-12** for CAD \$40 million and a September 5, 2052 maturity date. C129-12 was issued at a discount with proceeds of \$35.5 million (net of commissions), a fixed rate coupon of 3.150%, and an all-in yield of 3.699%. The debt was issued to finance new borrowing requirements.

On June 24, 2014, Manitoba Hydro secured long term debt series **C139** for CAD \$50 million and a September 5, 2054 maturity date. C139 was issued at a discount with proceeds of \$49.8 million (net of commissions), a fixed rate coupon of 3.650%, and an all-in yield of 3.666%. The debt was issued to finance new borrowing requirements.

Quarter 2 On July 11, 2014, Manitoba Hydro secured long term debt series C139-2 for CAD \$25 million and a September 5, 2054 maturity date. C139-2 was issued at a premium with proceeds of \$25.1 million (net of commissions), a fixed rate coupon of 3.650%, and an all-in yield of 3.625%. The debt was issued to refinance HydroBonds.

On September 1, 2014, existing floating rate debt series FA for \$150 million and a March 3, 2037 maturity date was linked to forward fixed interest rate swaps that were previously linked to maturing debt series FM-1 (\$25 million), FM-2 (\$75 million) and FM-3 (\$50 million). Debt series FA, as an underlying debt issue, reduced the fixed rate on the FM swap streams by 0.423% to the swap maturity date of September 1, 2029. The amended fixed rates are 6.211% (FA-1), 6.311% (FA-2) and 6.266% (FA-3).

On September 3, 2014, Manitoba Hydro secured long term debt series **C140** for AUD \$100 million and a March 3, 2025 maturity date. The issue was swapped to CAD \$101.6 million and a fixed rate coupon of 2.916%. The debt was issued to refinance \$101.6 million of maturing debt series FM (FM-1, FM-2, FM-3 and FM-4 totaling \$250 million).

On September 5, 2014, Manitoba Hydro secured long term debt series **GH** for CAD \$300 million and a June 2, 2024 maturity date. GH was issued at a premium with proceeds of \$312.1 million (net of commissions), a fixed rate coupon of 3.300%, and an all-in yield of 2.825%. The debt was issued to refinance \$148.4 million of debt series FM (FM-1, FM-2, FM-3 and FM-4 totaling



\$250 million), \$68.1 million of HydroBonds, as well as to finance \$83.5 million of new borrowing requirements.

On September 23, 2014, Manitoba Hydro secured long term debt series **GG-3** for CAD \$300 million and a September 5, 2045 maturity date. GG-3 was issued at a premium with proceeds of \$322.6 million (net of commissions), a fixed rate coupon of 4.050%, and an all-in yield of 3.642%. The debt was issued to finance new borrowing requirements.

Quarter 3 On November 20, 2014, Manitoba Hydro secured long term debt series **GG-4** for CAD \$400 million and a September 5, 2045 maturity date. GG-4 was issued at a premium with proceeds of \$434.2 million (net of commissions), a fixed rate coupon of 4.050%, and an all-in yield of 3.589%. The debt was issued to refinance maturing debt series FC-3 (\$200 million) as well as to finance new borrowing requirements (\$200 million).

On November 25, 2014, Manitoba Hydro executed a currency swap to convert USD \$200 million of principal for debt series **EE** to CAD \$228.4 million. The fixed coupon rate on EE remains at 9.500% on USD \$200 million.

On December 3, 2014, existing floating rate debt series **CO77-2** for \$100 million and **CO77-3** for \$50 million, each with a February 11, 2020 maturity date, were linked to a forward fixed interest rate swap that was previously linked to debt series FC-3 (\$200 million). Debt series CO77-2 and CO77-3, as underlying debt issues, reduced the fixed rate on \$150 million of the FC-3 swap stream by 0.221% to the swap maturity date of June 2, 2018. The amended fixed rate for both CO77-2 and CO77-3 is 6.927%.

On December 3, 2014, existing floating rate debt series **CO68** for \$50 million and a March 5, 2044 maturity date was linked to a forward fixed interest rate swap that was previously linked to maturing debt series FC-3 (\$200 million). Debt series CO68, as an underlying debt issue, reduced the fixed rate on \$50 million of the FC-3 swap stream by 0.111% to the swap maturity date of June 2, 2018. The amended fixed rate for CO68 is 7.037%

On December 4, 2014, Manitoba Hydro secured long term debt series **C137-5** for CAD \$50 million and a March 5, 2063 maturity date. C137-5 was issued at a premium with proceeds of \$51.1 million (net of commissions), a fixed rate coupon of 3.450%, and an all-in yield of 3.354%. The debt was issued to finance new borrowing requirements.

On December 31, 2014, Manitoba Hydro secured mitigation bond **5C-1** for CAD \$10 million and a December 31, 2024 maturity date. 5C-1 was issued at par, a fixed rate coupon, and all-in yield of 3.723%. The debt was issued to refinance \$10 million of maturing mitigation bond 5A (\$40 million).

On December 31, 2014, Manitoba Hydro secured mitigation bond **5C-2** for CAD \$10 million and a December 31, 2029 maturity date. 5C-2 was issued at par, a fixed rate coupon, and all-in yield of 4.049%. The debt was issued to refinance \$10 million of maturing mitigation bond 5A (\$40 million).

On December 31, 2014, Manitoba Hydro secured mitigation bond **5C-3** for CAD \$10 million and a December 31, 2034 maturity date. 5C-3 was issued at par, a

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fixed rate coupon, and all-in yield of 4.245%. The debt was issued to refinance \$10 million of maturing mitigation bond 5A (\$40 million).

On December 31, 2014, Manitoba Hydro secured mitigation bond **5C-4** for CAD \$10 million and a December 31, 2039 maturity date. 5C-4 was issued at par, a fixed rate coupon, and all-in yield of 4.311%. The debt was issued to refinance \$10 million of maturing mitigation bond 5A (\$40 million).

Payments to Government MFR 1

Provide a schedule of actual and forecast payments made to the Province and Municipalities for five historical years and for the 20-year forecast period.

Please see the following schedule for all payments to municipalities and the Province for 2010 through 2034.

				Payments 1	to the Pro	vince and M	unicipalities	s (Millions)				
						Provincial		Gross	Gross		Total	Provincial
E			Sinking			Mitigation	Municipal	Electricity	Export	Pro	ovincial	Payments
Fiscal	Water	Provincial	Fund	Capital	Payroll	or	GILT and	Operations	Revenue		yments	as a
Year	Rentals	Guarantee	Admin.	Taxes	Taxes	Settlement	Business	Revenue		(0	SILT &	Percentage
Ended		Fee	Fee			Obligations	Taxes				ness Tax	of Gross
						(1)				Not	Included)	Revenue
2010	114	72	1	46	9	0	20	1,583	427	\$	242	15%
2011	114	77	-	48	10	0	20	1,616	398	\$	249	15%
2012	111	82	-	52	10	1	21	1,573	363	\$	256	16%
2013	110	90	-	55	11	1	21	1,733	353	\$	267	15%
2014	118	96	-	60	11	0	23	1,914	439	\$	285	15%
<mark>201</mark> 5	117	105	-	64	12	8	24	1,831	409	\$	306	17%
2016	115	118	-	70	12	0	25	1,928	434	\$	315	16%
2017	104	140	-	83	12	0	26	2,008	450	\$	339	17%
2018	104	167	-	96	12	0	26	2,101	457	\$	379	18%
2019	103	197	-	104	13	0	27	2,222	479	\$	417	19%
2020	105	213	-	104	13	0	28	2,352	514	\$	435	18%
2021	115	225	_	103	13	0	28	2,732	817	\$	456	17%
2022	<mark>118</mark>	232	-	109	<mark>13</mark>	0	29	2,944	943	\$	472	16%
2023	118	231	-	107	14	0	29	3,054	959	\$	470	15%
2024	118	233	-	117	14	0	30	3,182	987	\$	482	15%
2025	117	236	-	117	14	0	31	3,298	996	\$	484	15%
2026	117	236	-	117	15	0	31	3,342	928	\$	485	15%
2027	118	238	-	117	15	0	32	3,475	944	\$	488	14%
2028	117	239	-	117	15	0	33	3,575	921	\$	488	14%
2029	117	240	-	117	16	0	33	3,702	920	\$	490	13%
2030	117	241	1	117	16	0	34	3,849	927	\$	492	(<mark>13%</mark>)
2031	118	239	1	118	16	0	35	3,980	911	\$	492	12%
2032	117	232	-	118	17	0	35	4,065	901	\$	484	12%
2033	117	232	-	120	17	0	36	4,145	883	\$	486	12%
2034	118	232	1	120	17	0	37	4,248	884	\$	488	11%

⁽¹⁾ Hydro entered into an agreement with the Province whereby the Corporation assumed obligations of the Province with respect to certain northern development projects. Obligations totaling \$143 million were assumed, with respect to which water rental charges had been fixed until March 31, 2001. Of these obligations, \$8 million remain to be paid in fiscal 2015 and future years.

A schedule detailing the calculation of the Net Hydro Guarantee fee for five historical years and through the twenty year forecast period.

The following schedule details the calculation of the net Manitoba Hydro Provincial Debt Guarantee Fee (PGF) for 2010/11 through to 2033/34.

MANITOBA HYDRO Provincial Debt Guarantee Fee (PGF) Calculations (\$ millions CAD)

	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
	2011	2012	2013	2014	2015	2016	2 <mark>017</mark>	2018	2019	2020	2021	2022
	(1)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Long Term Debt Balance	8,538	8,628	9,348	9,937	10,944	12,083	14,204	17,070	19,939	21,549	22,810	23,560
Short Term Debt Balance	-	-	-	-	-	83	142	55	111	134	74	7
Trust Investment from Pre-Financing	(554)	(100)	-	-	(90)	-	-	-	-	-	-	
PGF Assessed On	7,984	8,528	9,348	9,937	10,854	12,167	14,345	17,125	20,050	21,683	22,884	23,567
Guarantee Fee Rate	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %
Amount Paid to Province	80	85	93	99	109	122	143	171	201	217	229	236
Portion Allocated to Centra	(3)	(3)	(3)	(3)	(3)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Net MB Hydro Provincial Debt Guarantee Fee	77	82	90	96	105	118	140	167	197	213	225	232

Notes: (1) The fee calculation is based on ending principal par value debt balances at March 31 of the prior fiscal year. Manitoba Hydro is not assessed the debt guarantee fee on bonds issued for mitigation purposes. The long term debt balance presented in Payments to Government MFR 2 represents that amount of debt upon which the Provincial Debt Guarantee Fee was paid or is payable.

⁽²⁾ US Dollar long term debt balance at March 31, 2015 was converted at forecast year end exchange rate of 1.10 for the assessment of the 2016 PGF.

US Dollar long term debt balances at March 31, 2016, 2017, 2018 and 2019 were converted at forecast year end exchange rate of 1.12 for the assessment of the PGF for years 2017, 2018, 2019 and 2020.

US Dollar long term debt balances at March 31, 2020 and beyond were converted at forecast year end exchange rate of 1.10 for the assessment of the PGF for years 2021 and beyond.

MANITOBA HYDRO
Provincial Debt Guarantee Fee (PGF) Calculations
(\$ millions CAD)

	Forecast											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Long Term Debt Balance	23,445	23,584	23,884	23,882	24,232	24,432	24,432	24,572	24,472	23,772	23,772	23,742
Short Term Debt Balance	40	145	152	173	2	-	62	-	-	-	-	-
Trust Investment from Pre-Financing	_	-	-	-	-	-	-	-	-	-	-	
PGF Assessed On	23,485	23,729	24,036	24,055	24,234	24,432	24,494	24,572	24,472	23,772	23,772	23,742
Guarantee Fee Rate	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %	1.00 %
Amount Paid to Province	235	237	240	241	242	244	245	246	245	238	238	237
Portion Allocated to Centra	(4)	(4)	(4)	(4)	(5)	(5)	(5)	(5)	(5)	(5)	(6)	(6)
Net MB Hydro Provincial Debt Guarantee Fee	231	233	236	236	238	239	240	241	239	232	232	232

Notes

⁽¹⁾ The fee calculation is based on ending principal par value debt balances at March 31 of the prior fiscal year. Manitoba Hydro is not assessed the debt guarantee fee on bonds issued for mitigation purposes. The long term debt balance presented in Payments to Government MFR 2 represents that amount of debt upon which the Provincial Debt Guarantee Fee was paid or is payable.

⁽²⁾ US Dollar long term debt balance at March 31, 2015 was converted at forecast year end exchange rate of 1.10 for the assessment of the 2016 PGF.

US Dollar long term debt balances at March 31, 2016, 2017, 2018 and 2019 were converted at forecast year end exchange rate of 1.12 for the assessment of the PGF for years 2017, 2018, 2019 and 2020.

Provide a schedule detailing the calculation of the water rental payments for the last five historical years and through the twenty year forecast period. (Similar to PUB/MH 1-24 (c) 2010 GRA)

Water Rental Calculation

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	
Megawatt-Hours Generated (million mWh)	33.8	34.0	33.2	33.1	35.3	_
Converted to Horsepower-years	5.6	5.6	5.5	5.5	5.8	(1)
Rental Rate per Horsepower-year	20.32	20.32	20.32	20.32	20.32	_(2)
Calculated Water Annual Rental (\$ million)	\$ 113.0	\$ 113.8	\$ 110.8	\$ 110.8	\$ 117.9	_
Minimum Rental Adjustment Other Adjustment	1.0	0.3		(0.4)		(3) _(4)
Total Water Rentals	\$ 114.0	\$ 114.1	\$ 110.8	\$ 110.4	\$ 117.9	=

- (1) The Water Power Act defines "Horsepower-year" as kW.h/6535 X 1.075.
- (2) The water rental fee was calculated at a rate of 9.90 per Horsepower-year generated up to March 31, 2001. Effective April 1, 2001 the rate was increased to its current level of \$20.32 per Horsepower-year.
- (3) The Water Power Act of Manitoba provides that the water rentals charged for each generation site be the greater of (a) a fixed rate multiplied by the installed capacity of that site and (b) a fixed rate multiplied by the electrical output for the year of that site. Generally, the calculation under (b) based on actual output results in the greatest amount for each generation site. In some years, such as 2010 and 2011, it is necessary to adjust the amounts calculated under the (b) calculation for some specific sites to bring the total up to the amount calculated under the (a) installed capacity calculation method.
- (4) Water rentals relating to the Wuskwatim Generating Station were calculated at a reduced rate during the commissioning process. The full rental rate of \$20.32 per Horsepower-year was charged commencing October 6, 2012.

Water Rental Calculation					
	Forecast	Forecast	Forecast	Forecast	Forecast
	2015	2016	2017	2018	2019
Megawatt-Hours Generated (million mWh)	35.1	34.4	31.1	31.1	30.9
Converted to Horsepower-years	5.8	5.7	5.1	5.1	5.1
Rental Rate per Horsepower-year	20.32	20.32	20.32	20.32	20.32
Total Water Rentals (\$ million)	\$ 117.4	\$ 115.0	\$ 103.9	\$ 104.1	\$ 103.3
	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024
Megawatt-Hours Generated (million mWh)	31.5	34.5	35.3	35.3	35.3
Converted to Horsepower-years	5.2	5.7	5.8	5.8	5.8
Rental Rate per Horsepower-year	20.32	20.32	20.32	20.32	20.32
Total Water Rentals (\$ million)	\$ 105.1	\$ 115.4	\$ 117.9	\$ 117.8	\$ 117.8
	Forecast 2025	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029
Megawatt-Hours Generated	35.1	35.1	35.2	35.1	35.1
(million mWh)					
(million mWh) Converted to Horsepower-years	5.8	5.8	5.8	5.8	5.8
·	5.8	5.8	5.8	5.8 20.32	5.8 20.32
Converted to Horsepower-years					
Converted to Horsepower-years Rental Rate per Horsepower-year Total Water Rentals	20.32	20.32	20.32	20.32	20.32
Converted to Horsepower-years Rental Rate per Horsepower-year Total Water Rentals	20.32 \$ 117.5 Forecast	20.32 \$ 117.3 Forecast	20.32 \$ 117.8 Forecast	20.32 \$ 117.5 Forecast	20.32 \$ 117.5 Forecast
Converted to Horsepower-years Rental Rate per Horsepower-year Total Water Rentals (\$ million) Megawatt-Hours Generated	20.32 \$ 117.5 Forecast 2030	20.32 \$ 117.3 Forecast 2031	20.32 \$ 117.8 Forecast 2032	20.32 \$ 117.5 Forecast 2033	20.32 \$ 117.5 Forecast 2034
Converted to Horsepower-years Rental Rate per Horsepower-year Total Water Rentals (\$ million) Megawatt-Hours Generated (million mWh)	20.32 \$ 117.5 Forecast 2030 35.1	\$ 117.3 Forecast 2031 35.2	\$ 117.8 Forecast 2032 35.1	20.32 \$ 117.5 Forecast 2033 35.1	\$ 117.5 Forecast 2034 35.2

WUSKWATIM POWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
Revenue	41	82	98	103	107	111	114	119	124	129
	41	82	98	103	107	111	114	119	124	129
EXPENSES										
Operating and Administrative	13	12	12	12	12	13	13	13	13	13
Finance Expense	74	75	77	79	79	79	77	76	75	73
Depreciation and Amortization	26	27	27	27	27	27	27	27	27	27
Water Rentals and Assessments	5	5	5	5	5	5	5	5	5	5
	119	119	121	123	124	123	122	121	120	119
Net Income	(77)	(37)	(23)	(21)	(17)	(13)	(9)	(2)	4	11
Financial Ratios										
Debt	89%	91%	93%	95%	95%	95%	95%	95%	95%	93%

WUSKWATIM POWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
Revenue	134 134	121 121	124 124	128 128	130 130	135 135	140 140	145 145	151 151	156 156
EXPENSES					130	130	<u> </u>		101	
Operating and Administrative	14	14	14	14	15	11	11	11	11	11
Finance Expense Depreciation and Amortization	71 27	70 27	67 27	65 27	62 27	60 27	57 27	53 27	51 27	50 27
Water Rentals and Assessments	5	5	5	5	5	5	5	5	5	5
	<u> 117</u>	116	113	111	109	103	100	96	94	94
Net Income	17	5	11	17	21	32	40	49	56	63
Financial Ratios										
Debt	92%	91%	90%	88%	85%	81%	76%	75%	75%	75%

WUSKWATIM
(In Millions of Dollars)

Finance Expense 98 95 95 95 95 93 93 93 91 88 87 86 84 82 81 79 77 75 70 68 OM&A Costs 13 12 12 12 12 13 13 13 13 13 14 14 14 15 11 11 Depreciation 27 27 27 27 27 27 27 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	2034 66 11 28 6 5										
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	28 6 5										
Depreciation 27 27 27 27 27 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	6 5										
	5										
Capital Tax 8 8 8 8 8 8 8 7 7 7 7 7 7 6 6 6 6	_										
Water Rentals <u>5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5</u>											
151	116										
BIPOLE III & RIEL STATION											
(in Millions of Dollars)											
For the year ended March 31											
<u>2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2081 2092 2033</u>	2034										
Finance Expense 13 23 19 15 132 249 246 241 234 228 222 216 210 204 197 190 185 171 163	156										
OM&A Costs 8 12 12 12 13 13 13 14 14 14 15 15 15 15	16										
Depreciation 7 11 12 12 70 100 100 100 100 100 100 100 100 99 99 99 99 99	99										
Amortization of BPIII Reserve (54) (54)	_										
Capital Tax 7 11 17 22 23 23 23 22 22 21 21 20 20 19 19 18 18 17	17										
27 46 48 49 234 330 328 323 369 363 357 351 344 338 330 322 317 303 295	287										
FINANCING IMPACTS OF THE SUNK COSTS RELATING TO CONAWAPA											
(in Millions of Dollars)											
	fill millions of contast										
For the year ended March 31											
2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033	2034										
Finance Expense 11 22 21 21 20 20 19 18 17 16 16 15 14 13 12 11 10	9										
Amortization 8 13 13 13 13 13 13 13 13 13 13 13 13 13	13										
19 36 35 34 34 33 32 31 30 30 29 28 27 26 26 24 23	22										

The control transport form of date and the control transport d	AVERAGE UNIT REVENUE/COST CALC	FORECAST																			
The control trough size of trough size of the control trough size of the co	VOLUMES (In GW.h)	2014/15	2015/16	2016/17	2017/16	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/26	2028/29	2029/30	2030/31	2031/32	2032/33	2033/3
The control trough size of trough size of the control trough size of the co	Jemand																				
Demonstrate compage 1968 2007 2008		22214	22458	22458	22881	23009	23250	23318	23458	23684	23868	24099	24338	24572	24807	25041	25325	25817	25917	26226	2
Mary Control Special					-																
Martine Mart																					
## Professional pulses 19							6289				10017	9789	9482				A559				
March Control Name Sept																					
Histograms with a separate programs with a separate program with	otal Demand Volumes:	10000			200700			2000				7.000						(200)		120.73	
Histograms with a separate programs with a separate program with	unnis																				
The ment Connection 100 121 200 204 300 206 107 100 201	Wall-March 1994 1994 March 1994 M	35118	34418	31084	31129	30907	31458	24535	35775	35251	35253	35138	35078	35243	35141	25144	3514R	35224	35125	35133	3
whether theory 1 100 120 120 120 120 120 120 120 120 1																					
## Description of Column 2014 201																					
Sel Resimbles Demonstel Exercy Sales 140,277 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,328 140,328	otal Supply Volumes:																				3(
Sel Resimbles Demonstel Exercy Sales 140,277 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,289 140,327 140,328 140,328																					
Membrook Dominate Energy Salang Approok Rates 145,742 145,163 145,024 145,02	EVENUE/COST (in millions of dollars)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2028/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/
Additional Dominate Deviates 1.4 (April 2 1911, 20) 191																					
Table				1 460.247				2.7777777									1 623.939		(3)(1)(1)(1)(1)(1)(1)	1 677.031	1 695
Total Export Bales to Consults 72,748	Additional Domestic Revenue	0.000	57.448	117.638	182.720	249.787	320,910	394.053	471.445	554.231	641.409	734.027	631.780	934.799	1 043,117	1 157.220	1 279.663	1 409,139	1 485.929	1 585,867	1 648
Tries Eprox Sales to USA 40,003 50,0	Manitoba Domestic Sales	1 438,742	1 511.836	1 577.885	1 885,324	1 740.070	1 822.375	1 699,949	1 984.668	2 079.717	2 178.952	2 285,411	2 397.241	2 514.331	2 838,400	2 784,342	2 903,902	3 050,298	3 144.708	3 242,896	3 344
Tries Eprox Sales to USA 40,003 50,0	Annual Property of the Control of th																				
Table Export Sales to USA 348,0003 380,003 375,506 365,812 367,612 367,612 367,612 367,612 367,612 367,613 36		990000000	SEE SEE	200000000000000000000000000000000000000	200220	400000	120/01/04	101076692	2000000	122612246	980000000		17070 167000 644	DK DRUHAS	12007240001	ACCOMPANIES OF	98000004	9000000	NEW CONT	1985 (2000)	1 92
Other Non-Emergy Enterior December 1, 14, 44, 22, 14, 64, 72, 14, 64, 72, 14, 64, 72, 14, 64, 72, 14, 64, 72, 14, 64, 72, 14, 64, 72, 72, 72, 72, 72, 72, 72, 72, 72, 72	250																				
Text				2000 7 (2000) 7 (2000)		1771 Frida (200 (200 (activ))					97797 (S. 999 (7. 15. 1)							100000000000000000000000000000000000000	100000000000000000000000000000000000000		
Etter Residuls & Assessment (X. HT Work Parithus 488.892	The state of the s																				
Hard Rentile & Assessments Hard Rentile & Assessments Hard Rentile & Assessments 117.417 115.049 103.392 104.051 103.310 105.144 115.497 117.992 117.890 117.895 117.452 117.892 117.452 117.892 117.452 11	Market Market Control of the Control																				32
HH Worker Rentales	Extraprovincial Revenue	408.892	434, 167	449.738	486.968	478.677	814.277	816.884	943.484	958.548	987.327	998.962	928,484	943.890	921.247	920.031	927.099	911.013	901.120	883.073	883.
Assessments 4,934 5,683 6,155 6,329 6,699 6,597 6,742 6,923 7,109 7,909 7,909 7,909 7,909 8,115 8,234 8,559 8,789 9,005 9,289 9,005 9,289 10,000 10,0	Yater Rontels & Assessments:																				
Assessments 4,934 5,683 6,105 6,329 6,999 6,999 6,997 6,942 6,923 7,108 7,200 7,095 7,998 7,998 8,115 8,234 8,558 8,789 9,005 9,289 7,006 Water Rentals & Assessments: 124,468 122,847 112,167 112,459 111,346 112,896 112,397 12,154 12,159 111,346 112,896 112,397 12,154 12,159 111,346 112,896 112,397 12,154 12,159 111,346 112,896 112,397 12,154 12,159 111,346 112,896 112,397 12,154 12,159 111,346 112,896 112,397 12,154 12,159 111,346 112,397 12,398 12,397 12,398 12,397 12,398	MH Water Rentals	117.417	115.049	103.902	104.051	103.310	105.144	115.437	117.912	117,830	117.838	117.451	117,252	117.802	117.462	117,474	117,479	117.738	117.408	117,434	117.
Weter Fernistis & Assessmentic: 194.469 122.847 112.167 112.469 111.846 113.865 134.367 127.064 131.805 132.467 132.847 132.465 133.467 134.359 138.463 138.46	Assesments									7.108	7.300										9.
Wet Age 124,448 124,44	Other Costs	2.118	2.115	2.100	2.118	2.137	2.154	2.172	2.190	6.870	7.330	7.595	7.458	7.654	7.858	8.083	8.362	8.715	8.991	9.368	9.
MH Thermal Generation 6.179 6.582 19.875 22.463 23.634 21.194 12.716 13.672 13.493 14.02 15.238 16.653 13.725 13.878 14.858 13.923 14.300 14.763 12.00 properties of the control of the co	Water Rentals & Assessments:																				136
Purchased Energy 70.910 73.771 114.268 120.552 123.099 123.490 140.962 153.485 159.405 168.054 176.726 171.822 177.002 179.097 185.295 194.293 194.241 202.792 204.118 226 Other Non-Energy related Costs 14.342 12.663 8.777 9.148 9.463 9.463 12.076 27.499 16.313 16.790 17.215 17.085 18.198 18.556 194.293 194.241 202.792 204.118 226 Other Non-Energy related Costs 14.342 12.663 8.777 9.148 9.463 9.463 12.076 27.499 16.313 16.790 17.215 17.085 18.198 18.556 17.217 20.064 20.0610 21.174 27 176 176 176 176 176 176 176 176 176 17	uel & Power Purchased:																				
Other Non-Energy related Costs 14,142 12,663 8.777 9,148 9,453 9,568 12,076 29,249 16,313 16,730 17,215 17,586 18,198 18,556 19,048 19,579 20,064 20,610 21,174 22 Transmission Charges 42,958 37,416 48,013 50,034 50,965 51,131 67,564 67,344 67,969 68,612 69,275 70,213 70,914 71,636 72,378 73,141 78,423 79,229 80,057 88 74,18 130,432 190,533 802,172 207,171 205,343 233,518 262,795 267,369 288,890 277,868 274,379 282,788 283,033 290,699 301,818 308,861 316,932 320,113 333 48,18 18,18	MH Thermal Generation	6.179	6.582	19.875	22.437	23.634	21.194	12.914	12.716	13.672	13.493	14.642	15,258	16.653	13.745	13.878	14.658	13.923	14.300	14.763	15
Trems Mission Charges 42.958 37.416 48.013 50.034 50.985 51.131 67.564 67.344 67.969 68.612 69.275 70.213 70.914 71.636 72.378 73.141 78.423 79.229 80.057 8	Purchased Energy	70,910	73.771	114.268	120.552	123.099	123,490	140.962	153,485	159,405	168.054	176.726	171.822	177.022	179.097	185.295	194,239	194.241	202.792	204.118	214
Fuel & Power Purchased 134.183 136.432 190.533 202.172 207.171 205.383 233.616 262.796 267.369 286.890 277.866 274.979 282.786 283.033 290.699 301.616 306.661 316.532 320.113 335 202.172 207.171 205.383 233.616 262.796 267.369 286.890 277.866 274.979 282.788 283.033 290.699 301.616 306.661 316.532 320.113 335 202.172	Other Non-Energy related Costs	14.142	12.663	8.777	9.148	9.453	9.568	12.076	29.249	16.313	16.730	17.215	17.686	18.198	18.556	19.048	19.579	20.064	20.610	21.174	21
Fuel & Power Purchased 134.189 130.432 190.533 202.172 207.171 296.383 233.616 262.795 267.369 266.890 277.868 274.579 282.786 283.033 290.699 301.816 306.661 318.532 320.113 333 202.172 207.171 296.383 233.616 262.795 267.369 266.890 277.868 274.579 282.788 283.033 290.699 301.816 306.661 318.532 320.113 333 202.172	Transmission Charges	42.958	37.416	48.013	50.034	50.985	51.131	67.564	67.344	67.969	68.612	69.275	70,213	70.914	71.636	72.378	73.141	78.423	79.229	80,057	80
anitroba Domestic Energy Selses @ Approved Rates \$ 64.88 \$ 64.78 \$ 66.02 \$ 64.80 \$ 84.77 \$ 64.68 \$ 64.68 \$ 64.62 \$ 64.47 \$ 84.42 \$ 64.38 \$ 84.38 \$ 64.28 \$ 64.23 \$ 64.18 \$ 64.12 \$ 84.07 \$ 64.00 \$ 83.94 \$ 10.00 \$ 13.00 \$ 19.00 \$ 20.10 \$ 23.42 \$ 28.67 \$ 30.48 \$ 34.18 \$ 36.04 \$ 42.05 \$ 49.21 \$ 50.53 \$ 55.01 \$ 57.33 \$ 59.71 \$ 64.68 \$ 67.32 \$ 70.26 \$ 72.78 \$ 75.62 \$ 78.38 \$ 81.48 \$ 84.61 \$ 67.89 \$ 91.29 \$ 94.83 \$ 96.51 \$ 102.32 \$ 106.28 \$ 110.39 \$ 114.65 \$ 119.07 \$ 121.34 \$ 123.05 \$ 12.34 \$ 123.05 \$	Fuel & Power Purchased	134.189	130.482	190.933	202.172	207.171		233.516	262,796	257.3 59	266.890	277.868	274.979	282.788		290.699	301.616	306.651	316.932		332
is nitriobs Domestic Energy Seles @ Approved Rates \$ 64.88 \$ 64.75 \$ 66.02 \$ 64.80 \$ 84.77 \$ 84.68 \$ 64.62 \$ 84.47 \$ 84.42 \$ 84.38 \$ 84.38 \$ 84.28 \$ 64.23 \$ 64.18 \$ 84.12 \$ 84.07 \$ 64.00 \$ 83.94 \$ cdditional Domestic Energy Seles @ Approved Rates - 2.96 5.24 7.99 10.80 13.80 18.90 20.10 23.42 28.87 30.48 34.18 36.04 42.05 49.21 50.53 55.01 57.33 59.71 60.00 \$ 63.94 \$ cdditional Domestic Energy Seles @ meter - 2.96 5.24 7.99 10.80 13.80 18.90 20.10 23.42 28.87 30.48 34.18 36.04 42.05 49.21 50.53 55.01 57.33 59.71 60.00 \$ 64.88 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.05 12.00 \$ 64.88 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.05 12.00 \$ 64.88 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.05 12.00 \$ 64.88 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.05 12.00 \$ 64.88 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.05 12.00 \$ 64.88 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.05 12.00 \$ 64.88 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.05 121.30 \$ 64.18 64.1																					
Iditional Demostic Revenue - 2.56 5.24 7.99 10.86 13.60 16.90 20.10 23.42 26.67 30.48 34.18 36.04 42.05 46.21 50.53 55.01 57.33 58.71 60 444 Manitoba Domestic Energy Sales @ meter 64.68 67.32 70.26 72.78 76.62 78.38 81.48 84.61 67.89 91.29 94.83 98.51 102.32 106.28 110.39 114.65 119.07 121.34 123.65 12 444 Export Sales to Canada 35.86 41.32 56.73 58.67 61.85 65.44 70.39 74.22 70.89 75.53 78.53 82.67 85.02 89.47 91.24 94.72 97.80 101.37 104.39 11 444 Export Sales to USA (includes Net Trans Credits) 34.57 42.44 65.14 66.23 61.46 65.08 73.90 80.58 83.40 67.88 80.63 88.88 80.23 91.87 94.82 98.00 98.52 100.82 10 144 Export Sales (includes Net Trans Credits) 34.57 42.39 55.31 58.28 61.50 65.11 73.67 80.20 82.80 67.12 89.96 88.71 88.83 90.19 91.84 94.91 96.09 98.66 101.10 11 H Hydraulic Generation (Water Remists) \$ 3.34 \$ 3	VERAGE UNIT REVENUE/COST (\$/MW.h))	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/26	2028/29	2029/30	2030/31	2031/32	2032/33	2033
tal Manifobia Domestic Energy Sales @ meter 64.68 67.32 70.26 72.78 75.62 78.38 81.48 84.61 67.89 91.29 94.83 96.51 102.32 106.28 110.39 114.65 119.07 121.34 123.65 12 tal Export Sales to USA (includes Net Thans Credits) 34.57 42.44 55.14 56.23 61.46 65.08 73.90 60.58 63.40 67.88 90.53 88.88 90.23 81.87 94.82 98.00 98.52 100.82 10 tal Export Sales to USA (includes Net Thans Credits) 34.57 42.44 55.14 56.23 61.46 65.08 73.90 60.58 63.40 67.88 90.53 88.88 90.23 81.87 94.82 98.00 98.52 100.82 10 tal Export Sales (Weter Rentals) \$ 3.45 42.39 55.31 58.28 61.50 65.11 73.67 80.20 82.80 67.12 68.98 88.71 68.83 90.19 91.84 94.91 96.09 98.86 101.10 10 H Hydraulic Generation (Weter Rentals) \$ 3.34 \$		\$ 64.68				Service Control of the Control of th			AND SHOULD BE				1000				100 m				\$ 6
tal Export Sales to Canada 35.86 41.32 56.73 58.67 61.85 65.44 70.39 74.22 70.89 75.53 78.53 82.67 85.02 89.47 91.24 94.72 97.80 101.37 104.39 11 tal Export Sales to USA (includes Net Trans Credits) 34.57 42.44 55.14 56.23 61.46 65.08 73.90 80.56 83.40 67.89 90.53 88.88 88.98 90.23 81.67 94.92 98.00 98.52 100.82 11 tal Export Sales 34.67 42.39 55.31 58.26 61.50 65.11 73.67 80.20 82.80 67.12 89.98 86.71 89.83 90.19 91.84 94.91 96.09 98.56 101.10 11 + Hydraulic Generation (Weter Rentals) \$ 3.34 \$		191																			
tall Export Sales to USA (Includes Not Trans Credits) 34.57 42.44 55.14 58.23 61.46 65.08 73.90 60.58 83.40 67.68 90.53 88.88 85.98 90.23 81.87 94.82 98.00 98.52 100.82 10 100.	tal Manitoba Domestic Energy Sales @ meter	64.68	67.32	70.26	72.78	75.62	78.38	81.48	84.61	87.89	91.29	94.83	98.51	102.32	106.28	110.39	114.65	119.07	121.34	123.65	12
Lal Export Safes 34.57 42.39 55.31 58.26 61.50 65.11 73.67 80.20 82.80 67.12 89.96 86.71 88.83 90.19 91.84 94.91 96.09 98.66 101.10 11 Hydraulic Generation (Water Reminis) \$ 3.34 \$ 3.3	4 - 18 GA																				
H Hydraulic Generation (Weter Rentals) \$ 3.34 \$ 3.3																	1000000				
H Thorrmal Generation 91.38 54.56 81.03 64.31 87.54 71.04 85.53 89.55 92.72 98.07 99.18 103.09 107.44 112.88 117.70 122.43 129.03 134.10 139.75 1	tal Export Sales	34.67	42.39	55.31	58.28	61.50	65.11	73.67	80.20	82.80	87.12	89.98	88.71	86.83	90.19	91.84	94.91	96.09	98.66	101.10	1
	H Hydraulic Generation (Water Rentals)	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$
	H Thermal Generation	61.39	54.56	61.03	84.31	67.54	71.04	65,53	89, 55	92.72	96.07	99,16	103.09	107.44	112.66	117.70	122.43	129,03	134,10	139.75	1
	rchased Energy (including Assessments)	69.08	84.81	52.78	53,70	54.78	56,15	53,55	54, 60	55,67	58,48	59,54	80.15	61,57	63,15	84.14	85.81	67.98	89,31	71.64	

VOLUMES (In GW.h)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/26	2020/29	2029/30	2030/31	2031/32	2032/33
Demand:			St. 1-20-00-00-00-00-00-00-00-00-00-00-00-00-	-	s seemen		200000		to the second	no recons			200000000	100000	770000000		70.0 D. C.	20.000.000.000		-
lenitoba Domestic Energy Sales	21994 3198	22305 3237	22557 3122	22783 3140		23292 2874	29603 2901	23912 2900		24560 2994	24893 3045	25235 3115	25576 3184	25910 3222	26243 3342	26616 3381	26986 3448	27351 3489	27709 3544	26
Domestic energy Losses	3190 690				2831 597	2074 588							3184 435							
Irm & Opportunity Export Sales to Canada	9998	765 8921	580 6583				583 6315	448 9210		444 9663	448 9266	427 8855	6374	402 9607	587 12273	780 12947	761 12555	779 12266	771 12044	11
Firm & Opportunity Export Sales to US Net Transmission Losses	925	913						868		901	881	807	761	926	12273	12947	1233	1210	1183	
Total Demand Volumes:	36606	38140	W 30.00	2017/20			0.7270	37338		38561	38632	38430	38330	40267	43852	45001	44983	45098	45251	45
Bupply:	SUSSIBAL	E MODELETONS	100000440	0.0000000000000000000000000000000000000	10000000	1000000000	557977353	0000000	× 10000000	502 500 500	9997406	525500000		WARRANG C	455566	2012.00307.000	247000	6600000	0.505300	180
MH Hydraulic Generation	35143	34321	30910	30875	30854	30612		34298	35124	35265	35208	34905	34852	37263	40974	42011	41934	42142	42213	42
MH Thermal Generation	114	132				372		230		238	229	258	228	249	223	229	229	210	213	
Purchased Energy	1548	1687				2555		2810		3059	3095	3278	3250	2755	2458	2761	2820	2744	2825	
Total Supply Volumes:	36805	36140	33490	33674	33656	33638	34007	37338	38366	38561	38632	38439	36330	40267	43662	45001	44983	46096	48261	48
REVENUE/COST (in millions of dollars)	2013/14	2014/15	2015/16	201 0 /17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/28	2023/24	2024/25	2025/26	2026/27	2027/28	2029/29	2029/30	2030/31	2031/32	2032/3
otal Manitoba Domestic Energy Sales:																				
Manitoba Domestic Energy Sales @ Approved Rates	1 396,088	1 407.672	1 423.207	1 438.093	1 452 299	1 470.697	1 489.539	1 508.397	1 527.644	1 547.588	1 567.628	1 588.388	1 609.069	1 629.119	1 649.283	1 671.588	1 693,740	1 715,486	1 736.903	1 758.3
Additional Domestic Revenue	0.000	55,603	114.654	177.234	243,420	314.334	389.773	469,660	555,015	645,577	741.712	643,962	952,279	1 066,579	1 187.578	1 317.211	1 454,288	1 598,904	1 751.418	1 912 5
Manitoba Domestic Sales	1 396,088	1 483.275	1 537,881	1 815.327	1 695,719	1 785.031	1 679,312	1 976,277	2 082 659	2 193,110	2 309,340	2 432.350	2 501.348	2 895,698	2 638.861	2 986,789	3 146.028	3 314,300	3 468,321	3 670.8
Extra provincial Revenue:																				
Total Export Sales to Canada	24.182	23.524	19.281	22.107	25.464	27.79 9	29.371	22.785	24.158	24.914	26.918	26.325	28.023	25.746	40.709	57.274	58.127	62.156	63.938	65.6
Total Export Sales to USA	350.452	329.129	320,587	345.425	392.816	396.894	430.767	712.902	812.871	829.979	828.623	814.539	740.286	923.100	1 168.842	1 258,488	1 254,391	1 249.818	1 264.261	1 263.8
Other Non-Energy Related Revenues	15.587	11.423	2.416	2.461	2.550	2.599	2.648	2.698	2.750	2.802	2.855	2.909	2.965	3.021	3.078	3.137	3.196	3.257	3.319	3.3
Transmission Credits	18,206	18.834	19.290	19.754	20.568	21.000	21.399	21.805	22,220	22,642	23.072	23.510	23.957	24.412	24.876	25.349	25.830	26.321	26.821	27.3
Extraprovincial Revenue	408.426	382.910	361.574	389.747	441.398	448.292	484.185	760.191	861.999	880.335	881.468	867.284	795.231	976.280	1 237.506	1 344.248	1 341.544	1 341.562	1 368.339	1 360.21
Water Rentals & Assessments:																				
MH Water Rentals	117,480	114,725	103.321	103,204	103.132	102.323	104,108	114.646	117.407	117.875	117,687	116,672	116.496	124.556	136.958	140.427	140.168	140.862	141.100	141.0
Assessments	5.207	5.543	5.721	5.900	6.188	6.365	6.535	6.708	6.886	7.069	7.258	7.451	7.649	7.853	8.063	8.278	8.499	8.727	8.960	9.2
Other Costs	2.213	2.266	2.239	2.258	2.277	2.297	2.317	2.338	2.359	2.380	2.402	2.425	2.447	2.470	2.494	2.518	2.543	2.568	2.593	2.6
Water Rentals & Assessments:	124,900	122.534	111.281	111.362	111.598	110.956	112.960	123.691	125.662	127.325	127.347	126.548	126.592	134.880	147.515	161.224	181.210	182.167	152.653	162.9
Fuel & Power Purchased:																				
MH Thermal Generation	6.495	8.221	21.990	23.134	25.270	27.652	26.887	21.095	22.250	23.527	23.565	27.130	25.545	28.939	27.230	29,230	30.467	29.450	31.036	31.7
Purchased Energy	81.197	82.788	103,001	110.745	119.348	126.894	129.239	140.533	154.137	161.424	171.888	184.913	183.786	165.823	154.233	172,355	180,289	179.185	189,121	197.3
Other Non-Energy related Costs	11.353	8.768	6.804	7.045	7.304	7.560	7.822	8.951	9.402	9.690	9.987	10.294	10.610	10.937	11.273	11.620	11.978	12.347	12.728	13.1
Transmission Charges	45.311	42.530	41.717	47.648	50,630	51.692	52.674	79.572	78.916	78.419	78.065	77.843	77.741	77.726	77.768	77.866	78.020	78.230	78.495	78.6
Fuel & Power Purchased	144.366	142.306	173.611	188.572	202.552	213.798	218.822	250.161	284.704	273.060	283,606	300.190	297.682	283.425	270.504	291.071	300,754	299.212	311.379	321.0
NET PAC UNIT DESCRIPTION OF PACE PACE	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/3
AVERAGE UNIT REVENUE/COST (\$/MW.h))	2013/14	2014/15	2013/16	2010/17		2010/19	2018/20	2020/21	DIZTIZZ	2022123	2023/24	2024/25				2020/29	ZUZW3U	∠U3W31	2031/32	
lanitobs Domestic Energy Sales @ Approved Rates	\$ 63.48	\$ 63.11	\$ 63.09	\$ 63.12	\$ 63.18	\$ 63.14	\$ 63.11	\$ 63.08	\$ 83.03	\$ 63.01	\$ 62.96	\$ 82.94	\$ 62.91	\$ 62.88	\$ 82.85	\$ 62.80	\$ 62.78	\$ 62.72	\$ 82.68	\$ 62
Additional Domestic Revenue	1981	2.49	5.08	7.76	10.59	13.50	18.51	19.65	22.90	28,28	29,60	33,44	37.23	41.18	45.25	49.49	53,69	58,46	83.21	88
Total Manitoba Domestic Energy Sales @ meter	63.48	65.60	68.18	70.90	73.77	76.64	79.62	82.73	85.93	89.30	92.77	96.39	100.15	104.04	108.10	112.29	116.65	121.18	125.89	130.
otal Export Sales to Canada	35.87	34.97	39.38	44.63	50.28	55.95	59.63	63.79	87.41	70.47	75.44	78.24	81.51	82.63	82.00	63.12	86.75	90.38	94.03	98
otal Export Sales to USA (includes Net Trans Credits)	32.34	34.24	45.29	49,33	54.97	59.14	83.26	71.13	76.92	60.12	83,31	65,85	81.98	88,69	90.92	93.15	95.78	97.66	100.68	103
Total Export Sales	32.58	34.29	44.88	49.00	54.63	58. 91	63.00	70.86	76.59	79.78	83.02	85.58	81.97	88.51	90.58	92.64	95.30	97.27	100.32	103
MH Hydraulic Generation (Water Rentals)	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3
MH Thermal Generation	56.84	82.18	63,19	88.13	70.71	74.37	60,85	91.84	95,49	99.00	102.68	105,98	112.22	116,31	122.28	127.54	132.63	139,93	145.48	151
	2000000	5000000	10021100	(8000801	50024200	godinger	greates.	10032000	Q22000	2002	1225-229	12000	garay.	92.2	100	grantes o		22727	3000000	1617
urchased Energy (including Assessments)	55,83	52.38	46.71	49.67	51.35	52.18	53,69	52.40	53,53	55,08	57.66	58,68	56,90	63,03	96,09	65,43	66,95	68,49	70.11	72



Manitoba Hydro 2014/15 & 2015/16 General Rate Application COALITION/MH-I-27c

Section:	Tab 3: Appendix 3.3	Page No.:	13								
	Tab 5		44								
	Appendix 11.6		2-3 & 8-9								
Topic:	Integrated Financial Forecast and Ec	Integrated Financial Forecast and Economic Outlook									
Subtopic:	First Nation Partnerships										
Issue:	Financial Impacts on Manitoba Hydro										

PREAMBLE TO IR (IF ANY):

QUESTION:

Please explain more fully the derivation of the Non-Controlling Interest values for the years prior to the new Agreement coming into effect. For example, using 2014/15, how does the projected WPLP loss of \$77 M (per Appendix 11.6, page 2) translate into a Non-Controlling Interest value of \$25.45 M.

RATIONALE FOR QUESTION:

Information is required to better understand the impacts of WPLP and KHLP on Manitoba Hydro. The information goes to the reliability of forecasts and reasonableness of expenditures. The question does not duplicate PUB/MH 1-11.

RESPONSE:

The non-controlling interest values are the attribution of NCN's proportionate share of ownership interest in the net income and losses of WPLP to NCN's capital account on their balance sheet. In 2014/15 for example, NCN's 33% share of the net loss of \$77.129 million results in a reduction to NCN's capital account of \$25.453 million.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-11d

Section:	Tab 3 App. 3.3 IFF14	Page No.:	Sect. 10.0, p.13								
	Tab 11.4		App. 11.4 (WPLP),								
			p.1, App.								
			11.6, p.2 of 13								
Topic:	Integrated Financial Forecast & Eco	nomic Outlook									
Subtopic:	Wuskwatim Power Limited Partners	hip (WPLP)									
Issue:	Cost impacts to MH Ratepayers of the Amended WPLP Agreement										

PREAMBLE TO IR (IF ANY):

In WPLP (IFF12) Undertaking #8 (Dec 19, 2012), Manitoba Hydro indicated the in-service finance expense for the partnership would be \$75M for 2015, which corresponds to a total project cost of \$1.25B and not the \$1.67B total project cost reference in IFF11-2.

QUESTION:

Provide the detailed revenue calculations used for WPLP (IFF14) and compare that with the revenue calculations in IFF12.

RATIONALE FOR QUESTION:

This Information Request explores the financing of the WPLP and any impact on Manitoba Hydro.

RESPONSE:

As indicated in response to PUB Directive 11 from Order 43/13, the parties are still in the process of reviewing and negotiating final terms and is not in a position to provide the detailed information on the public record. Further, in accordance with Article 26.6(b) of the Wuskwatim PDA, Manitoba Hydro has an obligation to not disclose confidential information related to NCN or TPC. Therefore, Manitoba Hydro is not in a position to provide the detailed revenue calculations on the public record but has provided the requested information to the PUB in confidence.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-11e

Section:	Tab 3 App. 3.3 IFF14	Page No.:	Sect. 10.0, p.13								
	Tab 11.4		App. 11.4 (WPLP),								
			p.1, App. 11.6, p.2 of 13								
			11.6, p.2 of 13								
Topic:	Integrated Financial Forecast & Eco	nomic Outlook									
Subtopic:	Wuskwatim Power Limited Partners	hip (WPLP)									
Issue:	Cost impacts to MH Ratepayers of the Amended WPLP Agreement										

PREAMBLE TO IR (IF ANY):

In WPLP (IFF12) Undertaking #8 (Dec 19, 2012), Manitoba Hydro indicated the in-service finance expense for the partnership would be \$75M for 2015, which corresponds to a total project cost of \$1.25B and not the \$1.67B total project cost reference in IFF11-2.

QUESTION:

Provide the revenue requirement impacts resulting from the renegotiation of the WPLP Agreement.

RATIONALE FOR QUESTION:

This Information Request explores the financing of the WPLP and any impact on Manitoba Hydro.

RESPONSE:

For the purposes of MH14, Manitoba Hydro has incorporated projected impacts to net income which reflect the status of negotiations at the time the forecast was prepared. This results in a projected impact of approximately \$15 million to Electric operations net income. It should be noted that there is no formal agreement between Manitoba Hydro and the Wuskwatim Power Limited Partnership ("WPLP") at this time. As indicated in response to PUB Directive 11 from Order 43/13, the parties are still in the process of reviewing and negotiating final terms, which when concluded, will be incorporated into a written agreement.

Further details will be provided at the time the final written agreement is available.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-11d (Revised)

Section:	Tab 3 App. 3.3 IFF14	Page No.:	Sect. 10.0, p.13								
	Tab 11.4		App. 11.4 (WPLP),								
			p.1, App. 11.6, p.2 of 13								
			11.6, p.2 of 13								
Topic:	Integrated Financial Forecast & Eco	nomic Outlook									
Subtopic:	Wuskwatim Power Limited Partnership (WPLP)										
Issue:	Cost impacts to MH Ratepayers of the Amended WPLP Agreement										

PREAMBLE TO IR (IF ANY):

In WPLP (IFF12) Undertaking #8 (Dec 19, 2012), Manitoba Hydro indicated the in-service finance expense for the partnership would be \$75M for 2015, which corresponds to a total project cost of \$1.25B and not the \$1.67B total project cost reference in IFF11-2.

QUESTION:

Provide the detailed revenue calculations used for WPLP (IFF14) and compare that with the revenue calculations in IFF12.

RATIONALE FOR QUESTION:

This Information Request explores the financing of the WPLP and any impact on Manitoba Hydro.

RESPONSE:

Under the 2006 Power Purchase Agreement (PPA) between WPLP and MH, WPLP revenue related to energy generated during the on-peak hours is determined based on the average price Manitoba Hydro realizes for long-term export sales and import transactions. WPLP revenue related to energy generated during the off-peak hours is determined from the average price Manitoba Hydro realizes for all on-peak and off-peak opportunity export and import transactions, excluding the on-peak long-term transactions. The total of gross revenue related to on-peak and off-peak energy is reduced by transmission and related market participation charges and Manitoba Hydro's 3% marketing risk fee.

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-11d (Revised)

MH14 WPLP revenues incorporated the terms under negotiation in the Wuskwatim PDA Supplement Agreement #2 as at the time MH14 was prepared. MH14 assumes WPLP revenues will include a domestic component which aligns the price of Wuskwatim energy to system unit revenues rather than exports only for a ten year period from 2015/16 to 2024/25. Thereafter, the price of Wuskwatim energy reverts to the 2006 PPA terms noted above.

In addition, the 3% marketing risk fee is eliminated until such time as TPC equity and dividend loans are repaid and then the marketing risk fee increases to 36% for the remainder of the term of the agreement.

The terms assumed in MH14 did not substantively change in the executed PDA Supplement No. 2, except for the addition of an excess spill revenue adjustment.

The following table shows the derivation of WPLP revenues assumed in MH14 with 2015 adjusted for the executed agreement.

Fiscal Year Ending	WPLP PPA Average Unit Revenue (2006 PPA)	WPLP Average Generation Volume	Export Factor	Export Revenue Component	Manitoba Domestic Average Unit Revenue		Domestic Revenue Component	WPLP Total Revenue	Marketing Risk Fee	Spill Energy Revenue Adjustment	WPLP Revenue (Net of Marketing Risk Fee)
-	\$/GW.h	GW.h		(Millions \$)	\$/GW.h		(Millions \$)	(Millions \$)	(Millions \$)	(Millions \$)	(Millions \$)
2015	\$31	1 369	31%	\$13	\$63	69%	\$60	\$73	\$0	\$12	\$84
2016	\$33	1 493	30%	\$15	\$65	70%	\$68	\$82	\$0	$\overline{}$	\$82
2017	\$58	1 517	30%	\$26	\$67	70%	\$71	\$98	\$0		\$98
2018	\$61	1 517	30%	\$28	\$70	70%	\$75	\$103	\$0		\$103
2019	\$65	1 517	30%	\$30	\$73	70%	\$77	\$107	\$0		\$107
2020	\$67	1 517	30%	\$31	\$76	70%	\$80	\$111	\$0		\$111
2021	\$67	1 517	30%	\$30	\$78	70%	\$83	\$114	\$0		\$114
2022	\$72	1 517	30%	\$33	\$81	70%	\$87	\$119	\$0		\$119
2023	\$74	1 517	30%	\$34	\$85	70%	\$90	\$124	\$0		\$124
2024	\$79	1 517	30%	\$36	\$88	70%	\$93	\$129	\$0		\$129
2025	\$82	1 517	30%	\$37	\$91	70%	\$97	\$134	\$0		\$134
2026	\$80	1 517	100%	\$121	\$95	0%	\$0	\$121	\$0		\$121
2027	\$82	1 517	100%	\$124	\$99	0%	\$0	\$124	\$0		\$124
2028	\$84	1 517	100%	\$128	\$102	0%	\$0	\$128	\$0		\$128
2029	\$86	1 517	100%	\$130	\$106	0%	\$0	\$130	\$0		\$130
2030	\$89	1 517	100%	\$135	\$110	0%	\$0	\$135	\$0		\$135
2031	\$93	1 517	100%	\$140	\$115	0%	\$0	\$140	\$0		\$140
2032	\$96	1 517	100%	\$145	\$119	0%	\$0	\$145	\$0		\$145
2033	\$99	1 517	100%	\$151	\$121	0%	\$0	\$151	\$0		\$151
2034	\$103	1 517	100%	\$156	\$124	0%	\$0	\$156	\$0		\$156

The following table provides a comparison of WPLP revenues in MH12, MH14 with the adjustment for the executed Supplement #2, and MH14 under the 2006 PDA assumption.

2015 05 15 Page 2 of 3



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-11d (Revised)

WPLP Projected Revenue* (In Millions of Dollars)

Fiscal Year Ending	IFF12	IFF14 Current PPA Formula	IFF14 Supp #2 PPA Formula
2015	\$52	\$41	\$84
2016	\$72	\$48	\$82
2017	\$81	\$85	\$98
2018	\$87	\$90	\$103
2019	\$99	\$96	\$107
2020	\$108	\$99	\$111
2021	\$103	\$98	\$114
2022	\$112	\$107	\$119
2023	\$116	\$110	\$124
2024	\$124	\$117	\$129
2025	\$130	\$121	\$134
2026	\$120	\$118	\$121
2027	\$122	\$120	\$124
2028	\$128	\$124	\$128
2029	\$133	\$127	\$130
2030	\$139	\$131	\$135
2031	\$144	\$136	\$140
2032	\$150	\$141	\$145
2033		\$146	\$151
2034		\$152	\$156

*Net of marketing risk fee, where applicable.

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application COALITION/MH-I-27e

Section:	Tab 3: Appendix 3.3	Page No.:	13									
	Tab 5		44									
	Appendix 11.6		2-3 & 8-9									
Topic:	Integrated Financial Forecast and Ec	onomic Outlook										
Subtopic:	First Nation Partnerships											
Issue:	Financial Impacts on Manitoba Hydro											

PREAMBLE TO IR (IF ANY):

QUESTION:

Please confirm that the \$15 M impact on Manitoba Hydro referenced at Appendix 3.3, page 13 represents an annual reduction in Manitoba Hydro's net income over the 20-year forecast period. Also, please indicate whether there is any anticipated offsetting gain to Manitoba Hydro in the years following the initial 20-year forecast period.

RATIONALE FOR QUESTION:

Information is required to better understand the impacts of WPLP and KHLP on Manitoba Hydro. The information goes to the reliability of forecasts and reasonableness of expenditures. The question does not duplicate PUB/MH 1-11.

RESPONSE:

Manitoba Hydro confirms that currently, the \$15 million impact represents an annual reduction in the 20-year forecast period. The intent is that there will be offsetting gains in the years beyond the 20-year forecast but the degree to which the gains offset the net impacts in the 20-year forecast period will be dependent upon the actual financial performance of WPLP.

As outlined in Tab 10, Section 10.2.6, the response to PUB Directive 11 from Order 43/13, the parties are still in the process of reviewing and negotiating final terms and Manitoba



Manitoba Hydro 2014/15 & 2015/16 General Rate Application COALITION/MH-I-27e

Hydro is not in a position to provide details of the exact impacts of proposed terms. Once the agreement is finalized and executed, Manitoba Hydro will provide the information as requested.

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KEEYASK HYDROPOWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
Revenue	-	-	-	-	-	35	226	286	298	315
	-	-	-	-	-	35	226	286	<mark>298</mark>	315
EXPENSES										
Operating and Administrative	-	-	-	-	-	5	14	14	14	15
Finance Expense	0	0	0	0	0	20	181	247	248	247
Depreciation and Amortization	-	-	-	-	-	6	62	85	85	85
Water Rentals and Assessments	-	-	-	-	-	2	13	15	19	20
	0	0	0	0	0	32	270	361	367	367
Net Income	(0)	(0)	(0)	(0)	(0)	2	(44)	(74)	(69)	(52)
Financial Ratios										
Debt	75%	75%	75%	75%	75%	75%	75%	76%	77%	78%

KEEYASK HYDROPOWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
Revenue	324	318	324	331	337	349	361	370	384	399
	324	318	324	331	337	349	361	370	384	399
EXPENSES										
Operating and Administrative	15	15	15	15	15	15	14	15	15	15
Finance Expense	248	246	242	240	237	234	229	225	215	209
Depreciation and Amortization	85	85	85	85	85	85	85	85	85	85
Water Rentals and Assessments	20	20	20	20	20	21	21	21	22	22
	368	366	363	360	358	355	350	346	337	332
Net Income	(44)	(48)	(38)	(29)	(21)	(6)	11	25	47	67
Net intolle	(44)	(40)	(30)	(23)	(21)	(0)	- 11	23	47	
Financial Ratios										
Debt	78%	79%	79%	80%	80%	79%	79%	75%	75%	75%

KEEYASK (ISD 2019/20) (In Millions of Dollars)

									ţın	MIIIIOUS O	DOIINS)									
For the year ended March 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
		2010	2017	2010	2013	2020	2021	2022	2023	2024	2023	2020	ZUZJ	2025	2023	2030	2031	2032	2033	
Finance Expense	-	-	-	-	-	80	271	378	371	366	361	355	349	343	338	330	326	305	297	287
OM&A Costs	-	-	-	-	-	5	14	14	14	15	15	15	15	15	15	15	14	15	15	15
Depreciation	-	-	-	-	-	6	65	90	90	90	90	90	90	90	90	90	90	90	90	90
Capital Tax	8	12	17	23	28	31	32	32	31	31	30	30	29	29	29	28	28	27	27	26
Water Rentals		-	-	-	-	2	13	15	15	15	15	15	15	15	15	15	15	15	15	15
	8	12	17	23	28	124	395	528	521	<u>517</u>	<u>511</u>	505	498	492	48 6	<mark>479</mark>	473	452	443	434
											_									
					MANI	TOBA-MIN	INESOTA T	RANSMISS	ION PROJE	-		U.S. Borde	r New 500	kV Transm	ission Line	1)				
									{III	Millions of	r Dollars)									
For the year ended March 31																				
For the year chaca mater at	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Finance Expense	-	_	_	-	-	-	11	20	20	20	19	19	18	18	18	17	17	16	15	15
OM&A Costs	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation	-	-	-	-	-	-	5	6	6	6	6	6	6	6	6	6	6	6	6	6
Transmission Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Tax	0	0	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	0	0	1	1	1	2	17	28	27	27	27	26	26	26	25	25	24	23	23	22
								•	REAT NOT			IN LINE								
									{In	Millions of	r Dollars)									
For the year ended March 31																				
rui the year enaea maran 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2082	2033	2034
Finance Expense	-	-	-	_	-	-	34	48	46	44	42	41	39	37	35	34	32	29	27	25
OM&A Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amortization	-	-	-	-	-	-	16	21	21	21	21	21	21	21	21	21	21	21	21	21
Transmission Charges	-	-	-	-	-	-	16	16	15	15	15	15	14	14	13	13	17	17	17	16
Capital Tax	0	0	0	1	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	1	2	3	68	87	84	82	80	78	76	74	72	69	72	69	66	64

MILLER A. MILL	FORECAST 2014/15	2015/16	2016/17	2017/16	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/26	2028/29	2029/30	2030/31	2031/32	2032/33	2033/3
VOLUMES (In GW.h)	2014/15	2013/16	2016/17	2017/16	2014/19	2019/20	202021	2021/22	2022/23	2023/24	2020/25	2025/26	2020/27	202/126	2028/29	2023/30	2030/31	2031/32	2032/33	2033/3
Demand:																				
lenitolos Domestic Energy Sales	22214	22458	22458	22881	23009	23250	23318	23458	23684	23868	24099	24338	24572	24807	25041	25325	25617	25917	26228	20
Domestic energy Losses	3108	3297	3264	3302	2987	3013	2982	2919	2947	2976	3007	3040	3072	3107	3140	3178	3219	3260	3302	
rm & Opportunity Export Sales to Cenada	851	481	860	833	856	870	753	744	602	583	585	489	471	513	502	491	519	513	495	
rm & Opportunity Export Sales to US	9164	8596	6444	6192	8143	6289	9464	10232	10207	10017	9769	9462	9410	6960	8760	8559	6200	7670	7501	- 0
et Transmission Losses	968	933	866	632	630	648	927	991	970	949	919	884	877	840	819	793	764	727	692	
otal Demand Volumes:	36315	35764	33691	33841	33624	34071	37444	38345	39380	38394	36379	38211	38401	35227	38261	38347	38319	38297	38217	31
ibaja:																				
H Hydraulic Generation	35116	34418	31084	31129	30907	31456	34535	35275	35251	35253	35138	35078	35243	35141	35144	35146	35224	35125	35133	12
H Thermal Generation	101	121	326		350		151	142		140	148	148	155	122	118	120	108	107	108	
urchased Energy	1098	1226		2363			2758	2927		3000	3094	2984	3004	2964	3019	3082	2987	3056	2979	
otal Supply Volumes:	36315	35764		33841	33624		37444	38348		38393	38379	38211	36401	38227	38281	38347	36319	38287	38217	3
EVENUE/COST (in millions of dollars)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/26	2025/26	2028/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/
tal Manitoba Domestic Energy Sales:																				
Manitoba Domestic Energy Sales @ Approved Rates		1 454.388	1 460.247	1 482.604	1 490.283	1 501.465	1 505.896	1 513.421	1 525.486	1 537.543	1 551.384	1 565.461	1 579.532	1 593.283	1 607.122	1 623.939	1 641.157	1 658.777	1 677.031	1 69
Additional Domestic Revenue	0.000	57.448	117.638	182.720	249.787	320,910	394.053	471. 44 5	554.231	641.409	734.027	631.780	934.799	1 043,117	1 157.220	1 279.663	1 409,139	1 485,929	1 585,867	1 64
Manitoba Domestic Sales	1 438,742	1 511.836	1 577,885	1 885,324	1 740.070	1 822.375	1 699,949	1 984,666	2 079.717	2 178.952	2 285,411	2 307,241	2 514.331	2 838,400	2 784,342	2 903,802	3 050,298	3 144.706	3 242,896	3 34
draprovincial Revenue:																				
Total Export Sales to Canada	28.748	15.104	43.626	43.531	47.304	51,022	46.615	48 502	36 226	37.180	37.246	32.888	32.290	37.764	37.507	37.947	41.847	42.826	47.202	4
Total Export Sales to USA																				
Other Non-Energy Related Revenues	343.003 19.698	380.033 15.880	379.506	386.312 2.820	403.741	435.497 2.934	741.684 2.990	866.129 3.046	892.952 3.104	920.218	928.219 3.223	864.490 3.285	879.933 3.347	851.215 3.411	849.642 3.475	855.646 3.542	835.028	823.503	805.418 3.747	80
Transmission Credits			2.765		2.876												3.609	3.677		9
Extraprovincial Revenue	17.443 408.892	22.140 434.167	23.841 449,738	24.294 486.988	24.755 478.677	24.824 814.277	25,296 816,884	25,776 943,484	26.266 958,548	26.765 987.327	27.274 998.962	27.792 928,484	28.320 943.890	28.858 921.247	29.406 920.031	29.965 927.099	30.534 911.013	31,114 901,120	31.706 883.073	32 883
Example with the volume	400.002	40% 107	775.100	104.500	470.077	VINALI	010.004	J-10-10-1	202.010	901.063	350.502	320,704	J-10.050		320.001	321.033	911.010	301.120	900.019	990.
fater Rontels & Assessments:																				
MH Water Rentals	117.417	115.049	103.902	104.051	103.310	105.144	115.437	117.912	117.830	117.838	117.451	117.252	117.602	117.462	117.474	117.479	117.738	117,408	117.434	117
Assessments	4.934	5.683	6.165	6.329	6.499	6.567	6.742	6.923	7.108	7.300	7.496	7.696	7.908	8.115	8.334	8.558	8.789	9.026	9.269	5
Other Costs	2.118	2.115	2.100	2.118	2.137	2.154	2.172	2.190	6.870	7.330	7.595	7.458	7.654	7.858	8.033	8.362	8.715	8.991	9.368	9
Water Rentals & Assessments:	124,469	122.847	112.167	112.499	111.946	113.866	124.381	127.024	131.808	132,467	132.641	132,407	133,389	133,436	133.841	134.399	135.243	138,426	136.071	134
el & Power Purchased:																				
MH Thermal Generation	6.179	6.582	19.875	22.437	23.634	21.194	12.914	12.716	13.672	13.493	14.642	15,258	16.653	13.745	13.878	14.658	13.923	14.300	14.763	1
Purchased Energy	70,910	73.771	114.268	120.552	123,099	123,490	140.962	153,485	159,405	168.054	176.726	171.822	177.022	179.097	185.295	194,239	194.241	202.792	204.118	21
Other Non-Energy related Costs	14.142	12.663	8.777	9.148	9.453	9.568	12.076	29.249	16.313	16.730	17.215	17.686	18.198	18.556	19.048	19.579	20.064	20.610	21.174	2
Transmission Charges	42.958	37.416	48.013	50.034	50.985	51.131	67.564	67.344	67.969	68.612	69.275	70.213	70.914	71.636	72.378	73.141	78.423	79.229	80,057	8
Fuel & Power Purchased	134.189	130.482	190.933	202.172	207.171	205.383	233.516	262,796	257.3 59	266.890	277.868	274.979	282.788	283.033	290.699	301.616	306.651	318.932	320.113	33.
VERAGE UNIT REVENUE/COST (\$/MW.h))	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/26	2028/29	2029/30	2030/31	2031/32	2032/33	2033
unitobs Domestic Energy Sales @ Approved Rates	\$ 64.68	\$ 64.76	\$ 65.02	\$ 64.80	\$ 64.77	\$ 64.68	\$ 64.58	\$ 64.52	\$ 84.47	\$ 64.42	\$ 64.38	\$ 84.33	\$ 64.28	\$ 64.23	\$ 84.18	\$ 64.12	\$ 64.07	\$ 64.00	\$ 83.94	\$
ditional Domestic Revenue	1981	2.56	5.24	7.99	10.88	13,60	16.90	20, 10	23.42	26.87	30,48	34.18	36,04	42.05	46.21	50.53	55,01	57.33	59.71	3
al Manitoba Domestic Energy Sales @ meter	64.68	67.32	70.26	72.78	75.62	78.38	81.48	84.61	87.89	91.29	94.83	98.51	102.32	106.28	110.39	114.65	119.07	121.34	123.65	1
al Export Sales to Canada	35.86	41.32	56.73	58.67	61.85	65.44	70.39	74.22	70.89	75.53	78.53	82.67	85.02	89.47	91.24	94.72	97.80	101.37	104.39	1
al Export Sales to USA (Includes Net Trans Credits)	34.57	42.44	55.14	58,23	61.46	65.08	73.90	80, 58	83.40	67.88	90.53	66.68	86,98	90,23	91.87	94.82	96,00	98,52	100.92	1
al Export Sales	34.67	42.39	55.31	58.28	61.50	65.11	73.67	80. 20	82.80	67.12	89.98	86.71	86.83	90.19	91.84	94.91	96 .09	98.66	101.10	•
Hydraulic Generation (Water Rentals)	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$
Thermal Generation	61.39	54,56	61.03	84.31	67.54	71.04	65,53	89, 55	92.72	98,07	99,16	103.09	107.44	112.66	117.70	122.43	129,03	134.10	139.75	1
	2250	1000000	<u> </u>	0.2107	56721-224	202.0200	52465	1906-054	Subsection	3020200	USERON	122000	2222	ALEX 27 (1)	22000	22124251	(2000200)	32.20	2000200	
rchased Energy (including Assessments)	69.08	84.81	52.78	53,70	54.78	56.15	53,55	54.60	55.67	58.46	59.54	80.15	61.57	63,15	84.14	65,81	67.98	69.31	71.64	

The control of the property of of	VOLUMES (In GW.h)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/26	2020/29	2029/30	2030/31	2031/32	2032/3
The Propose place proper place	OLUMES (III GW.II)	2013/14	2014/13	2013/10	2010/17	ZUTTTIO	ZUIGITS	2018/20	2020121	2021/22	2022123	ZUZSI ZN	202423	2023620	ZUZUZI	DIZIES	2020/28	2028/30	2030831	2031/32	20321
Description programme 1988 2007 310 2008	emand:																				
Martine Department From Processing 1989 796 896	lenitoba Domestic Energy Sales	21994	22305	22557	22783	22988	23292	23603	23912	24238	24660	24893	25235	25576	25910	26243	26616	26986	27351	27709	28
Mary	Domestic energy Losses	3198	3237	3122	3140	2831	2874	2901	2900	2929	2994	3045	3115	3184	3222	3342	3381	3448	3489	3544	
The manufacture 1968 1968 1969 196	rm & Opportunity Export Sales to Canada	690	765	580	588	597	588	583	448	449	444	448	427	435	402	587	780	761	778	771	
March Connection 1948 3496 34	rm & Opportunity Export Sales to US	9998	8921	6583	6437	8600	6192	6315	9210	9831	9663	9266	8855	6374	9607	12273	12947	12555	12256	12044	1
Part	let Transmission Losses	925	913	848	628	640	693	606	868	920	901	661	807	761	926	1206	1277	1233	1210	1183	
Hybranic Connection 1994 3425 3970 2970	otal Demand Volumes:	36606	36140	33490	33574	33656	33638	34007	37338	38386	38561	38632	38430	36330	40267	43652	45001	44983	45098	45251	4
Thermal Convertor 114 122 34 54 344	upply:																				
PREMISE District 1988 1 1607 227 2 140 200 2 100 200 200 200 200 200 200 200	H Hydraulic Generation	35143	34321	30910	30875	30854	30612	31146	34298	35124	35265	35208	34905	34852	37263	40974	42011	41934	42142	42213	- 4
EMPLICATION (Association of declary) 2011/14 2014/15	H Thermal Generation	114	132	348	350	357	372	333	230	233	238	229	256	228	249	223	229	229	210	213	
EVENUE/COST (in millions of deliars) ### 291419 29	urchased Energy	1548	1687	2232	2348	2444	2555	2529	2810	3008	3059	3095	3276	3250	2755	2456	2761	2820	2744	2825	
The Markinship Dermarks Exercy States Markinship Dermarks Exercy States Markinship Dermarks Exercy States Approach Robus (1,000) (1,00	otal Supply Volumes:	36805	35140	33490	33674	33686	33638	34007	37338	38365	38561	38632	38439	36330	40267	43662	45001	44983	46096	48281	4
The Markinship Dermarks Exercy States Markinship Dermarks Exercy States Markinship Dermarks Exercy States Approach Robus (1,000) (1,00	EVENUE POST (is millione of delices)	2849/4	2014/15	2015/16	2012/17	2017/19	2019/10	2649/2N	2020/24	2024/22	2022/22	2022/24	2024/25	anasias	2020/27	2077/20	2026/20	2020787	2020/34	2011/22	2032/
Marchical Domeste Energy Sales 4,000 19,00	EVEROESCOST (El milione di Gonzale)	2010010	201410	201010	2010/17	2011714	2010110	201420	2020021	TAT II ZZ	2022	2424124	202-220	2020120	ZVZWZI	2427720	2020120	202000	Zesaroi	200 1/02	2002
Additional Community (1997) (1																					
Entropy Name of Series 1994,066 1481,275 1937,467 1915,327 1947,167 1947,167 1974,2	Manitobe Domestic Energy Sales @ Approved Rates	1 396,088	1 407.672	1 423,207	1 438.093	1 452,299	1 470.697	1 489.539	1 508.397	1 527.644	1 547.588	1 567.628	1 588.388	1 609.069	1 629.119	1 649.283	1 671.588	1 693.740	1 715.486	1 736.903	1 758
Tried Export Selects to Commiss Total Export Selects to USA SS.462 283229 320.557 346.45 580.86 10.56 Total Export Selects to USA SS.462 383229 320.557 346.45 580.86 10.56 Total Export Selects to USA SS.462 383229 320.557 346.45 580.86 10.56 Total Export Selects to USA SS.462 383229 320.557 346.45 580.86 10.56 Total Export Selects to USA SS.462 383229 320.557 346.45 580.86 10.56 Total Export Selects to USA SS.462 383229 320.557 346.45 580.86 10.56 Total Export Selects to USA SS.462 38328 31.45 38 10.45 38	Additional Domestic Revenue	0.000	55,603	114.654	177.234	243,420	314.334	389.773	469,860	555,015	645,577	741.712	843,962	952,279	1 066,579	1 187.578	1 317.211	1 454.288	1 598,904	1 751.418	1 912
Tried Espert Sales to USA 50,525 50,	Manitoba Domestic Sales	1 396,068	1 483.275	1 537.881	1 815.327	1 695,719	1 785.031	1 679,312	1 976,277	2 082 659	2 103,110	2 309,340	2 432,350	2 591,348	2 895,698	2 638.861	2 996,799	3 148,028	3 314.390	3 468,321	3 670
Tried Espert Sales to USA 50,525 50,																					
Total Export Sales to URA 32.0.423 32.0.123																					
Other Non-Emergy Pointered Revenues 15.587 1.14.25 2.466 2.450 2.559 2.599 2.468 2.698 2.750 2.599 2.020 2.855 2.999 2.865 3.021 3.078 3.137 3.158 3.257 3.319 2.157 2.1580 2.501 2	150	24.182	23.524	19.281	22.107	25.464	27.799	29.371	22.785	24.158	24.914	26.918	26.325	28.023	25.746	40.709	57.274	58.127	62.156	63.938	65
Text				320.587	345.425			430.767	712.902	812.871	829.979					1 168.842		1 254.391	1 249.818		126
Extraprovincial Revenue 484.08 882.910 391.974 385.747 441.998 446.188 796.191 891.999 880.338 891.408 977.284 794.231 978.280 1227.090 1344.40 1341.602 1346.290 134 145.60 1227.000 134.50 134.500 14.60.20 134.60		15.587	11.423	2.416	2.461	2.550	2.599	2.648	2.698	2.750	2.802	2.855	2.909	2.965	3.021	3.078	3.137	3.196	3.257	3.319	3
Table Promities & Assessmentors 117,480 114,725 103,321 109,204 103,132 102,203 104,108 114,646 117,407 117,875 117,687 116,572 116,496 124,596 136,958 140,407 140,158 140,100 1	Transmission Credits	18.206	18.834	19.290	19.754	20.568	21.000	21.399	21.805	22,220	22,642	23.072	23.510	23.957	24.412	24.876	25.349	25.830	26.321	26.821	27
HM Work Rentals 117,480 147,725 1003.21 1003.20 1003.20 1003.20 1003.23 1004.06 117,407 117,807 115,672 116,606 124,556 136,588 140,427 140,105 140,882 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,10	Extraprovincial Revenue	408.426	382.910	361.574	389.747	441.398	448,292	484.185	760.191	861.999	880.335	881.468	867.284	795.231	976.280	1 237.506	1 344.248	1 341.644	1 341.552	1 358.339	1 360.
HM Work Rentals 117,480 147,725 1003.21 1003.20 1003.20 1003.20 1003.23 1004.06 117,407 117,807 115,672 116,606 124,556 136,588 140,427 140,105 140,882 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,100 140,840 141,10	Mata Bratala & Amazana anta																				
Assensamenter 5.207 5.544 5.721 5.500 6.188 6.395 6.535 6.708 6.288 7.09		447 400	444 705		400 004	400 400	400.000			447.407	***	447.007	***	***	***	405.000	4 40 400		440.000	*** ***	
Other Costs 2.213 2.266 2.239 2.258 2.277 2.297 2.317 2.338 2.550 2.360 2.402 2.407 2.407 2.407 2.407 2.408 2.518 2.518 2.518 2.528 2.533 2.568 2.533 19.806																					141
Weter Ferrisis & Assessments: 124,360 122,694 111,361 111,892 111,698 116,596 112,890 122,691 128,662 127,328 127,347 128,546 120,692 144,560 147,570 162,693 146,580 147,570 162,693 147,593			955000000000000000000000000000000000000			100 March 100 Ma	(5000000)	5007407		27777		347000000000000000000000000000000000000	37000000000	0.7.25.77		2000.00000		100000000	0.000	70777	9
The A Power Purchased: MH Thermal Generation 6.495 8.221 21.990 23.134 25.770 27.652 26.887 21.095 22.250 23.527 23.565 27.130 25.545 28.539 27.230 25.230 30.467 29.450 31.096 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2																					162
MH Thermal Conversion 6.495 8.22 2.1999 23.134 25.70 27.652 28.887 21.095 22.290 23.527 23.565 27.130 25.545 28.939 27.220 29.230 30.467 29.450 31.086 32 Purbrased Energy elected Costs 11.393 8.788 6.804 7.045 7.394 7.560 7.822 8.551 9.40.533 154.137 161.424 171.298 184.913 183.786 165.823 172.555 180.289 173.505 189.127 11.0735 189.127 189		124.300	122.00	111.201	111.502	111.099	110.300	112.590	120.031	120.002	121.020	121.041	120.040	120.092	107.004	141.010	101.224	101.210	IOE IOF	102.000	142
Purchased Energy 81.197 82.788 103.001 110.745 119.348 128.894 129.239 140.533 154.137 161.424 171.888 184.913 183.786 165.823 172.355 180.289 179.185 189.121 13.55 18.786 8.04 7.045 7.394 7.595 7.394 7.595 7.895 9.402 9.595 10.284 10.510 10.937 11.273 11.520 11.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 12.347 12.738 1 1.578 1																					
Other Non-Energy related Coets 11.953 8.768 6.804 7.045 7.304 7.550 7.822 8.951 9.402 9.690 9.987 10.294 10.610 10.937 11.273 11.620 11.978 12.347 12.728 1 Transmission Charges 45.311 42.530 41.717 47.648 50.630 51.692 52.674 79.572 78.916 78.419 78.005 77.843 77.741 77.725 77.768 77.866 78.020 78.230 78.495 7 Fuel & Power Purchased 144.366 142.306 173.811 188.672 202.662 213.798 216.822 260.161 284.704 273.080 283.606 300.180 297.882 283.425 270.604 291.071 300.764 293.212 311.379 32 11.620 11.978 12.347 12.349 12.347 12		6.495	8.221	21.990	23.134	25.270	27.652	26.887	21.095	22.250	23.527	23.565	27.130		28.939			30.467	29.450	31.036	3:
Transmission Charges 45.311 42.530 41.717 47.648 50.630 51.692 52.674 79.572 78.916 78.419 78.065 77.843 77.741 77.726 77.768 77.666 78.020 78.230 78.435 7 Fuel & Power Purchased 144.366 142.308 173.611 188.672 202.652 213.798 216.822 260.161 264.704 273.060 283.606 300.190 297.892 283.425 270.604 291.071 300.764 293.212 311.379 32 31.4779 30.478	Purchased Energy	81.197	82.788	103,001	110.745	119.348	126.894	129.239	140.533	154.137	161.424	171.888	184.913	183.786	165.823	154.233	172,355	180,289	179.185	189.121	19
Fuel & Power Purchased 144.366 142.306 173.611 188.672 202.662 213.796 216.622 260.161 264.704 273.060 283.606 300.180 297.682 283.425 270.604 291.071 300.764 293.212 311.379 32 202.000 200.161 264.704 273.060 283.606 300.180 297.682 283.425 270.604 291.071 300.764 293.212 311.379 32 202.000 200.161 264.704 273.060 283.606 300.180 297.682 283.425 270.604 291.071 300.764 293.212 311.379 32 202.000 202.00	Other Non-Energy related Costs	11.353	8.768	6.804	7.045	7.304	7.560	7.822	8.951	9.402	9.690	9.987	10.294	10.610	10.937	11.273	11.620	11.978	12.347	12.728	13
VERAGE UNIT REVENUE/COST (\$/MW.in)) 2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2018/20 2020/21 2021/22 2022/23 2023/24 2024/25 2025/26 2026/27 2027/28 2028/29 2028/30 2030/31 2031/32 203 anitoba Domestic Energy Sales @ Approved Rates \$ 63.48 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.11 \$ 63.09 \$ 63.11 \$ 63.09 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.11 \$ 63.09 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.11 \$ 63.09 \$ 63	Transmission Charges	45.311	42.530	41.717	47.648	50.630	51.692	52.674	79.572	78.916	78.419	78.065	77.843	77.741	77.726	77.768	77.866	78.020	78.230	78.495	78
anitobs Domestic Energy Sales @ Approved Rates \$ 63.48 \$ 63.11 \$ 63.09 \$ 63.12 \$ 63.18 \$ 63.14 \$ 63.11 \$ 63.09 \$ 63.12 \$ 83.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 83.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 83.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 83.18 \$ 63.11 \$ 63.08 \$ 83.03 \$ 83.01 \$ 62.98 \$ 62.94 \$ 62.91 \$ 62.98 \$ 82.86 \$ 82.80 \$ 62.72 \$ 82.88 \$ 83.11 \$ 63.09 \$ 63.12 \$ 83.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 83.18 \$ 63.11 \$ 63.09 \$ 63.12 \$ 83.11 \$ 63.09 \$ 63.12 \$ 83.11 \$ 63.09 \$ 63.12 \$ 83.11 \$ 63.09 \$ 63.11 \$ 63.08 \$ 83.03 \$ 83.01 \$ 62.98 \$ 62.94 \$ 62.91 \$ 62.98 \$ 82.86 \$ \$ 82.80 \$ 52.80 \$ 56.27 \$ 82.88 \$ 83.21 \$ 83.11 \$ 63.09 \$ 63.12 \$ 83.11 \$ 63.09 \$ 63.12 \$ 83.11 \$ 63.09 \$ 63.11 \$ 63.09 \$ 63.11 \$ 63.09 \$ 63.11 \$ 63.09 \$ 63.11 \$ 63.09 \$ 63.11 \$ 63.00 \$ 63.01 \$ 62.98 \$ 62.94 \$ 62.91 \$ 62.98 \$ 82.86 \$ \$ 82.80 \$ 56.80 \$ 56.40 \$ 53.80 \$ 56.40 \$ 63.21 \$ 63.11 \$ 63.00 \$ 70.80 \$ 70.90 \$ 73.77 \$ 76.64 \$ 79.62 \$ 82.20 \$ 28.20 \$ 28.20 \$ 28.20 \$ 33.44 \$ 37.23 \$ 41.18 \$ 42.25 \$ 49.40 \$ 53.80 \$ 58.40 \$ 63.21 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 104.04 \$ 108.10 \$ 112.29 \$ 116.65 \$ 121.18 \$ 125.89 \$ 100.15 \$ 104.04 \$ 108.10 \$ 104.04 \$ 108	Fuel & Power Purchased	144.366	142.306	173.611	188.672	202.552	213.798	216.822	250.161	284,704	273.060	283,606	300.180	297.682	283,425	270.504	291.071	300.754	299.212	311.379	32
anlitoba Domestic Energy Sales @ Approved Rates \$ 63.48 \$ 63.11 \$ 63.09 \$ 63.12 \$ 83.18 \$ 63.11 \$ 63.01 \$ 63.11 \$ 63.08 \$ 83.03 \$ 83.01 \$ 62.94 \$ 62.91 \$ 62.96 \$ 2.86 \$ 52.80 \$ 62.72 \$ 82.86 \$ 40.00 \$ 53.80 \$ 50.00 \$ 7.76 \$ 10.99 \$ 13.50 \$ 10.51 \$ 19.85 \$ 22.90 \$ 28.29 \$ 28.80 \$ 33.44 \$ 37.23 \$ 41.18 \$ 48.25 \$ 49.40 \$ 53.80 \$ 58.46 \$ 83.21 \$ 40.00 \$ 63.48 \$ 65.80 \$ 63.12 \$ 80.12																					
- 2.49 5.08 7.76 10.59 13.50 18.51 19.85 22.90 28.28 28.00 33.44 37.23 41.18 45.25 49.49 53.89 58.46 63.21 tall Manifolds Domeetic Revenue - 2.49 5.08 7.76 10.59 13.50 18.51 19.85 22.90 28.28 28.00 33.44 37.23 41.18 45.25 49.49 53.89 58.46 63.21 tall Manifolds Domeetic Revenue - 63.48 65.60 68.18 70.90 73.77 78.64 79.62 82.73 85.93 89.30 92.77 96.39 100.15 104.04 108.10 112.29 116.65 121.18 125.89 1 dall Export Safes to USA (includes Net Trans Credits) 35.87 34.97 39.38 44.63 50.28 55.95 59.63 63.79 67.41 70.47 75.44 78.24 81.51 82.83 82.00 83.12 85.75 90.36 94.03 and Export Safes to USA (includes Net Trans Credits) 32.34 34.24 45.29 49.33 64.97 59.14 63.26 71.13 78.92 80.12 83.31 85.85 81.98 88.89 80.92 93.15 95.78 97.88 100.88 1 tall Export Safes 32.63 34.29 44.88 49.00 54.63 58.91 63.00 70.86 76.59 79.78 83.02 85.58 81.97 88.51 90.58 92.64 95.30 97.27 100.32 1 H Hydraulic Generation (Water Rentals) \$ 3.34 \$ 3.	VERAGE UNIT REVENUE/COST (\$/MW.h))	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032
tal Mamiltoba Domestic Energy Sales @ meter 63.48 65.60 68.18 70.90 73.77 76.64 79.62 82.73 85.93 89.30 92.77 96.39 100.15 104.04 108.10 112.29 116.65 121.18 125.89 1 tal Export Safes to Canada 35.87 34.97 39.38 44.63 50.28 55.96 59.63 63.79 67.41 70.47 75.44 78.24 81.51 82.83 82.00 83.12 86.75 90.38 94.03 tal Export Safes to USA (includes Net Trans Credits) 32.34 34.24 45.29 49.33 54.97 59.14 83.26 71.13 76.92 80.12 83.31 85.85 81.97 88.69 90.92 93.15 95.79 97.86 100.68 1 tal Export Safes (USA) (includes Net Trans Credits) 32.56 34.29 44.88 49.00 54.63 58.91 63.00 70.88 76.59 79.78 83.02 85.58 81.97 88.51 90.58 92.64 95.30 97.27 100.32 1 Hydraulic Generation (Water Remiss) \$ 3.34 \$	anitoba Domestic Energy Sales @ Approved Rates	\$ 63.48	\$ 63.11	\$ 63.09	\$ 63.12	\$ 63.18	\$ 63.14	\$ 63.11	\$ 63.08	\$ 63.03	\$ 63.01	\$ 62.96	\$ 82.94	\$ 62.91	\$ 62.56	\$ 62.85	\$ 62.80	\$ 62.78	\$ 62.72	\$ 62.68	\$ 1
tal Export Sales to Canada 35.87 34.97 39.38 44.63 50.28 55.95 59.63 63.79 67.41 70.47 75.44 78.24 81.51 82.63 82.00 83.12 86.75 90.38 94.03 tal Export Sales to USA (includes Net Trans Credits) 32.34 45.29 49.33 54.97 59.14 63.26 71.13 76.92 80.12 83.31 85.85 61.98 88.69 90.92 93.15 95.79 97.86 100.68 1 tal Export Sales 34.29 44.88 49.00 54.63 68.91 63.00 70.88 76.59 79.78 63.02 85.58 61.97 88.51 90.58 92.64 96.30 97.27 100.32 1 Hydraulic Generation (Weter Rentals) \$ 3.34 \$	ditional Domestic Revenue		2.49	5.08	7.76	10.59	13,50	18.51	19.65	22,90	26.29	29,60	33,44	37.23	41.18	45.25	49.49	53,69	58.48	63.21	1
all Export Sales to USA (includes Net Trans Credits) 32.34 34.24 45.29 48.33 54.97 59.14 63.26 71.13 76.92 60.12 63.31 85.85 61.98 68.69 90.92 93.15 95.78 97.86 100.68 1 all Export Sales to USA (includes Net Trans Credits) 32.56 34.29 44.88 48.00 54.63 58.91 63.00 70.86 76.59 79.78 63.02 85.58 61.97 68.51 90.58 92.64 95.30 97.27 100.32 1 (Hydraulic Generation (Weter Remials) \$ 3.34 \$	al Manitoba Domestic Energy Sales @ meter	63.48	65.60			73.77	76.64	79.62	82.73	85.93	89.30	92.77	96.39	100.15		108.10	112.29	116.65	121.18	125.89	1
al Export Sailee 32.56 34.29 44.88 49.00 54.63 58.91 63.00 70.86 76.59 79.78 83.02 85.58 81.97 88.51 90.58 92.64 95.30 97.27 100.32 1 Hydraulic Generation (Water Rentals) \$ 3.34	al Export Sales to Canada	35.87	34.97	39.38	44.63	50.28	55.95	59.63	63.79	67.41	70.47	75.44	78.24	81.51	82.63	82.00	63.12	86.75	90.38	94.03	
al Export Balee 32.56 34.29 44.88 49.00 54.63 58.91 63.00 70.86 76.59 79.78 83.02 85.58 81.97 88.51 90.58 92.64 95.30 97.27 100.32 1 I Hydraulic Generation (Water Remists) \$ 3.34 \$ 3.3	al Export Sales to USA (Includes Net Trans Credits)	32.34	34.24	45.29	49,33	54.97	59.14	83.26	71.13	76.92	60.12	83,31	85,85	81.98	88,69	90.92	93.15	95.78	97.68	100.68	1
Thermal Generation 56,84 62.18 63,19 66,13 70.71 74.37 90.85 91.84 95.49 99.00 102.86 105.98 112.22 116.31 122.26 127.54 132.83 139.83 145.46 1															88.51						
	Hydraulic Generation (Water Rentals)	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$
	Thermal Generation	56.84	82.18	63,19	98.13	70.71	74.37	60,85	91.84	95,49	99.00	102.68	105,98	112.22	116.31	122.28	127.54	132.63	139,93	145.48	1
		appearant.	100000000	1000	100000000	ALCO DE COMPONIO		200200-00	1001321 AV	an grannon	30-22/1000	10000000000	270,000	CIENTO-W	ALCONO.	10400000	1200000	107 to 100 to	Segretor.	and the second	



Manitoba Hydro 2014/15 & 2015/16 General Rate Application COALITION/MH-I-27a

Section:	Tab 3: Appendix 3.3	Page No.:	13								
	Tab 5		44								
	Appendix 11.6		2-3 & 8-9								
Topic:	Integrated Financial Forecast and Ec	onomic Outlook									
Subtopic:	First Nation Partnerships										
Issue:	Financial Impacts on Manitoba Hydro										

PREAMBLE TO IR (IF ANY):

QUESTION:

Please confirm that the Non-Controlling Interest values shown in the IFF14 Operating statement all relate to the WPLP. If not, please separate of the WPLP values.

RATIONALE FOR QUESTION:

Information is required to better understand the impacts of WPLP and KHLP on Manitoba Hydro. The information goes to the reliability of forecasts and reasonableness of expenditures. The question does not duplicate PUB/MH 1-11.

RESPONSE:

Confirmed.

The non-controlling interest reflects the portion of NCN's ownership interest in WPLP's net income or losses that is attributed to NCN's capital account on their balance sheet.

KHLP's preferred distributions to the KCN were reclassified from non-controlling interest to a period cost in water rentals in MH14.



Section:	Tab 3: Appendix 3.3	Page No.:	13								
	Tab 5		44								
	Appendix 11.6		2-3 & 8-9								
Topic:	Integrated Financial Forecast and Economic Outlook										
Subtopic:	First Nation Partnerships										
Issue:	Financial Impacts on Manitoba Hydro										

PREAMBLE TO IR (IF ANY):

QUESTION:

What are the assumed annual distributions to KCN that have been included in the Fuel & Power Purchased Expense for IFF14?

RATIONALE FOR QUESTION:

Information is required to better understand the impacts of WPLP and KHLP on Manitoba Hydro. The information goes to the reliability of forecasts and reasonableness of expenditures. The question does not duplicate PUB/MH 1-11.

RESPONSE:

The response to MIPUG/MH-I-42a explains that the Fuel and Power Purchased expense includes KCN preferred investment adjustments totaling \$13.9 million in 2021/22. The preferential distributions projected to be paid to the KCN in IFF14 are included in water rentals.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application COALITION/MH-I-27g

Section:	Tab 3: Appendix 3.3	Page No.:	13								
	Tab 5		44								
	Appendix 11.6		2-3 & 8-9								
Topic:	Integrated Financial Forecast and Economic Outlook										
Subtopic:	First Nation Partnerships										
Issue:	Financial Impacts on Manitoba Hydro										

PREAMBLE TO IR (IF ANY):

QUESTION:

Please explain how the distributions to KCN were determined based on the forecast operating statement for KHLP provided in Appendix 11.6 (page 8).

RATIONALE FOR QUESTION:

Information is required to better understand the impacts of WPLP and KHLP on Manitoba Hydro. The information goes to the reliability of forecasts and reasonableness of expenditures. The question does not duplicate PUB/MH 1-11.

RESPONSE:

Projected KCN preferred distributions are calculated in accordance with the KHLP Limited Partnership Agreement. For each one per cent of KCN's projected 2.17% total investment¹, preferred distributions are equal to:

• 0.8% of the first two hundred and fifty million (\$250,000,000) dollars of Adjusted Gross Revenues earned in Fiscal Years ending after the Final Closing Date, plus

¹ \$35.6 million (including KCN's \$25 million own cash investment required plus the projected \$6.6 million preferential distribution credit described in MIPUG/MH-I-42a) out of \$1.45 billion total KHLP equity.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application COALITION/MH-I-27g

- 1.2% of the amount of Adjusted Gross Revenues in excess of two hundred and fifty million (\$250,000,000) dollars and less than or equal to one billion (\$1,000,000,000) dollars, plus
- 1.6% of Adjusted Gross Revenues in excess of one billion (\$1,000,000,000) dollars.

Adjusted Gross Revenues is a defined term in the KHLP Limited Partnership Agreement which is equal to:

- KHLP revenues, less
- KHLP operating expenses, less
- Amortization and finance expense on Pre-Construction Costs, and less
- Amortization and finance expense on non-major capital costs incurred post Keeyask project in-service.

The KHLP revenues and operating expenses are as shown on the KHLP projected operating statement.

Pre-Construction Costs are defined in the Limited Partnership Agreement as costs incurred after March 31, 2009 up to the construction start (not including the Keeyask Infrastructure Project) along with the associated accrued interest capitalized during construction up to the Keeyask project in-service.

Post Keeyask project in-service capital costs are the annual costs required to upgrade, replace or refurbish components of the Keeyask generating station once it is operational. These costs exclude Major Capital Costs (JKDA) which are capital costs in excess of \$40 million.

The following schedule provides the annual calculation for KCN projected preferred distributions to the end of the forecast in 2033/34.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application COALITION/MH-I-27g

			Adjusted Gross Revo	enue Calculation (Se	ction 1.01, Pg. 3 LPA		Post Final Closing Distribution Calculation (Section 6.09(a,i,A) LPA, Pg. 34)										
			Non-Major Post-Inservice Capital Pre- Construction Costs Costs						1.7%	2.6%	3.5%						
Fiscal Vear	KHLP Revenue	KHLP O&M	Amortization	Finance Expense	Amortization 1	Finance Expense	Adjusted Gross Revenues	1st Tranche 2	nd Tranche	3rd Tranche	Distribution 1st	Distribution 2nd	KCN Preferred Distribution 3rd Tranche	Total KC Prefern Distribution			
2015	-	-	-	-	-		-	-	-	-	-	-	-	Distributi			
2016	_	_	_	_	_	_	_	_	_	_	_	_	_				
2017	_	_	-	_	-	_	_	_	_	_	_	_	_				
2018	_	_	-	_	_	_	_	_	_	_	_	_	_				
2019	_	_	-	_	-	_	_	_	_	_	_	_	-				
2020	_	_	-	_	-	_	_	_	_	_	_	_	-				
2021	-	-	-	_	-	_	-	_	_	_	_	_	-				
2022	-	-	-	_	-	_	-	_	_	_	_	_	-				
2023	297.9	14.4	4.0	17.4	-	_	262.1	250.0	500.0	1,000.0	4.3	0.3	-	4.			
2024	314.6	14.6	4.0	17.1	-	-	279.0	250.0	500.0	1,000.0	4.3	0.8	-	5.			
2025	324.1	14.8	4.0	16.9	-	-	288.4	250.0	500.0	1,000.0	4.3	1.0	-	5.			
2026	317.9	14.9	4.0	16.6	-	-	282.4	250.0	500.0	1,000.0	4.3	0.8	-	5.			
2027	324.2	14.7	4.0	16.4	-	-	289.2	250.0	500.0	1,000.0	4.3	1.0	-	5.			
2028	331.3	15.0	4.0	16.2	-	-	296.2	250.0	500.0	1,000.0	4.3	1.2	-	5.			
2029	337.3	15.3	4.0	15.9	-	-	302.2	250.0	500.0	1,000.0	4.3	1.4	-	5.			
2030	349.0	15.4	4.0	15.7	0.0	-	314.0	250.0	500.0	1,000.0	4.3	1.7	-	6.			
2031	360.7	14.3	4.0	15.4	0.1	0.2	326.7	250.0	500.0	1,000.0	4.3	2.0	-	6.			
2032	370.5	14.6	4.0	15.2	0.1	0.2	336.4	250.0	500.0	1,000.0	4.3	2.3	-	6.			
2033	384.2	14.9	4.0	14.9	0.1	0.2	350.1	250.0	500.0	1,000.0	4.3	2.6	-	7.			
2034	398.6	15.2	4.0	14.7	0.1	0.2	364.4	250.0	500.0	1,000.0	4.3	3.0	-	7.			

KEEYASK (ISD 2019/20) (In Millions of Dollars)

	(in millions of Dollars)																			
For the year ended March 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	2013	2010	201/	2016	2013	2020	2021	2022	2125	2024	2023	2020	ZUZI	2028	2023	2030	2031	2052	2033	2034
Finance Expense	-	-	-	-	-	80	271	378	371	366	361	355	349	343	338	330	326	305	297	287
OM&A Costs	-	-	-	-	-	5	14	14	14	15	15	15	15	15	15	15	14	15	15	15
Depreciation	-	-	-	-	-	6	65	90	90	90	90	90	90	90	90	90	90	90	90	90
Capital Tax	8	12	17	23	28	31	32	32	31	31	30	30	29	29	29	28	28	27	27	26
Water Rentals						2	13	15	15	15	15	15	15	15	15	15	15	15	15	15
	8	12	<u>17</u>	23	28	124	395	<mark>52</mark> 8	521	<u>517</u>	<u>511</u>	505	498	492	486	4 <mark>79</mark>	473	<u>452</u>	443	434
					MANI	TODA MIN	INESOTA T	RANSMISS	ION PROIE	CT (E	ahr Domose	II S Barris	u Nove 500	kki Tennom	deelee Liec					
					MANI	TOBA-ITIII	IIILAVIA I	10-043191133		Millions o		·O.3. DOI 40	11 144H JOO	KV IIGIISII	nission mud	•,				
For the year ended March 31																				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Finance Expense	-	_	-	_	-	-	11	20	20	20	19	19	18	18	18	17	17	16	15	15
OM&A Costs	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation	-	-	-	-	-	-	5	6	6	6	6	6	6	6	6	6	6	6	6	6
Transmission Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Tax	0	0	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	0	0	1	1	1	2	17	28	27	27	27	26	26	26	25	25	24	23	23	22
								•	REAT NO	THERN TR	ANSMISSIC	ON LINE								
									{in	Millions o	f Dollars)									
For the year ended March 31																				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2082	2033	2034
Finance Expense	-	-	-	_	-	-	34	48	46	44	42	41	39	37	35	34	32	29	27	25
OM&A Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amortization	-	-	-	-	-	-	16	21	21	21	21	21	21	21	21	21	21	21	21	21
Transmission Charges	-	-	-	-	-	-	16	16	15	15	15	15	14	14	13	13	17	17	17	16
Capital Tax	0	0	0	1	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	1	2	3	68	87	84	82	80	78	76	74	72	69	72	69	66	64

WUSKWATIM
(In Millions of Dollars)

Finance Expense 98 95 95 95 95 93 93 93 91 88 87 86 84 82 81 79 77 75 70 68 OM&A Costs 13 12 12 12 12 13 13 13 13 13 14 14 14 15 11 11 Depreciation 27 27 27 27 27 27 27 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	2034 66 11 28 6 5
Finance Expense 98 95 95 95 93 93 91 88 87 86 84 82 81 79 77 75 70 68 OM&A Costs 13 12 12 12 12 13 13 13 13 14 14 14 14 15 11 11 11	66 11 28 6 5
OM&A Costs 13 12 12 12 13 13 13 13 14 14 14 15 11 11 11 11	11 28 6 5
OM&A Costs 13 12 12 12 13 13 13 13 14 14 14 15 11 11 11 11	11 28 6 5
	28 6 5
Depreciation 27 27 27 27 27 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	6 5
	5
Capital Tax 8 8 8 8 8 8 8 7 7 7 7 7 7 6 6 6 6	_
Water Rentals <u>5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5</u>	
151	116
BIPOLE III & RIEL STATION	
(in Millions of Dollars)	
For the year ended March 31	
<u>2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2081 2092 2033</u>	2034
Finance Expense 13 23 19 15 132 249 246 241 234 228 222 216 210 204 197 190 185 171 163	156
OM&A Costs 8 12 12 12 13 13 13 14 14 14 15 15 15 15	16
Depreciation 7 11 12 12 70 100 100 100 100 100 100 100 100 99 99 99 99 99	99
Amortization of BPIII Reserve (54) (54)	_
Capital Tax 7 11 17 22 23 23 23 22 22 21 21 20 20 19 19 18 18 17	17
27 46 48 49 234 330 328 323 369 363 357 351 344 338 330 322 317 303 295	287
FINANCING IMPACTS OF THE SUNK COSTS RELATING TO CONAWAPA	
(in Millions of Dollars)	
For the year ended March 31	
2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033	2034
Finance Expense 11 22 21 21 20 20 19 18 17 16 16 15 14 13 12 11 10	9
Amortization 8 13 13 13 13 13 13 13 13 13 13 13 13 13	13
19 36 35 34 34 33 32 31 30 30 29 28 27 26 26 24 23	22

POINTE DU BOIS SPILLWAY (In Millions of Dollars)

For the year ended March 31																				
·-	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2083	2034
Finance Expense	14	29	32	32	31	31	31	31	30	30	29	29	28	27	27	26	26	24	23	23
OM&A Costs	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Depreciation	4	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Capital Tax	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2
	20	39	42	42	41	41	41	40	40	39	39	38	37	37	36	35	35	33	33	32
(
										DS	M									
									(in Millions	of Dollars	l								
For the year ended March 31																				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2083	2034
Finance Expense	11	11	13	16	19	21	23	23	23	22	21	20	18	17	17	16	16	15	15	16
OM&A Costs	11	11	1	16	1	1	1	23 1	1	1	1	20 1	18	17	1	15	2	2	2	2
Amortization	32	35	38	41	45	51	55	60	63	65	68	67	66	63	50	55	52	50	49	50
Capital Tax	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
Capital Tax	44	49	53	60	66	75	81	86	89	90	91	90	87	83	79	74	71	68	68	69
£-								-								15.0				
										USTAININ	IG CAPITAL									
									(in Millions	of Dollars	1								
For the years and add the sub 24																				
For the year ended March 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2083	2034
(.	ختربح	2019	ZJ1/	2010	2019	2020	ZUZI	2022	2025	2024	2023	2420	202/	2026	2023	2030	ZUGI	2032	2003	2034
Finance Expense	17	50	86	120	150	180	215	242	261	286	311	334	362	389	412	433	456	457	472	494
Depreciation	8	25	43	63	81	100	117	134	149	163	179	193	206	222	236	251	264	279	295	309
Capital Tax	5	8	11	13	16	18	20	22	24	26	28	31	33	35	37	39	41	44	45	48
	31	82	140	196	246	298	352	398	434	475	519	558	601	646	686	723	762	780	813	851
Total Incremental Revenue Requirement																				
(without Net Extraprovincial Revenues)	281	375	468	556	800	1 052	1 460	1 668	1 738	1765	1 793	1814	1 834	1858	1 874	1880	1 904	1872	1 882	1897
Annual Rate Increase/(Decrease)	19.56%	5.20%	4.98%	4.11%	11.79%	10.66%	15.82%	6.72%	1.78%	0.42%	0.36%	0.12%	0.12%	0.22%	0.00%	-0.38%	0.12%	-1.46%	-0.32%	-0.15%
Cumulative Rate Increase	19.56%	25.78%	32.04%	37.47%	53.68%	70.05%	96.95%	110.19%	113.93%	114.82%	115.59%	115.85%	116.11%	116.59%	116.59%	115.77%	116.04%	112.88%	112.19%	111.88%
Net Extraprovincial Revenues	(150)	(181)	(147)	(142)	(160)	(195)	(459)	(554)	(569)	(588)	(586)	(521)	(528)	(505)	(496)	(491)	(469)	(449)	(427)	(414)
Total Incremental Revenue Requirement (with	(130)	(101)	(347)	(142)	(100)	(155)	(435)	(354)	(305)	(300)	(380)	(321)	(320)	(303)	(450)	(431)	(405)	(445)	(427)	(424)
Net Extraprovincial Revenues)	131	194	321	413	540	857	1 001	1 114	1 169	1177	1 208	1 292	1306	1 353	1 378	1389	1 435	1 424	1455	1483
Annual Rate Increase/(Decrease)	9.10%	3.88%	7.64%	4.82%	11.81%	9.86%	6.00%	4.27%	1.73%	-0.02%	0.72%	2.65%	0.08%	1.20%	0.45%	-0.12%	1.04%	-0.87%	0.49%	0.38%
Cumulative Rate Increase	9.10%	13.34%	22.00%	27.87%	42.97%	57.06%	66.49%	73.61%	76,60%	76.58%	77.85%	82.56%	82.70%	84.90%	85.75%	85.53%	87.45%	85.82%	86.74%	87.46%
IFF14 Annual Rate Increase	0.00%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	2.00%	2.00%	2.00%
IFF14 Cumulative Rate Increase	0.00%	3.95%	8.06%	12.32%	16.76%	21.37%	26.17%	31.15%	36.33%	41.72%	47.31%	53.13%	59.18%	65.47%	72.01%	78.80%	85.86%	89.58%	93.37%	97.24%

WUSKWATIM POWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
Revenue	41	82	98	103	107	111	114	119	124	129
	41	82	98	103	107	111	114	119	124	129
EXPENSES										
Operating and Administrative	13	12	12	12	12	13	13	13	13	13
Finance Expense	74	75	77	79	79	79	77	76	75	73
Depreciation and Amortization	26	27	27	27	27	27	27	27	27	27
Water Rentals and Assessments	5	5	5	5	5	5	5	5	5	5
	119	119	121	123	124	123	122	121	120	119
Net Income	(77)	(37)	(23)	(21)	(17)	(13)	(9)	(2)	4	11_
		_	_	_	_	_	_	_	_	
Financial Ratios										
Debt	89%	91%	93%	95%	95%	95%	95%	95%	95%	93%

Debt

WUSKWATIM POWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
·	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
Revenue	134	121	124	128	130	135	140	145	151	156
	134	121	124	128	130	135	140	145	151	156
EXPENSES										
Operating and Administrative	14	14	14	14	15	11	11	11	11	11
Finance Expense	71	70	67	65	62	60	57	53	51	50
Depreciation and Amortization	27	27	27	27	27	27	27	27	27	27
Water Rentals and Assessments	5	5	5	5	5	5	5	5	5	5
	117	116	113	111	109	103	100	96	94	94
Net Income	17	5	11	17	21	32	40	49	56	63
Net mone	1/	<u> </u>	11	1/		32	40	43	30	
Financial Ratios										

90%

88%

85%

81%

76%

75%

75%

92%

91%

75%

KEEYASK HYDROPOWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
Revenue	-	-	-	_	-	35	226	286	298	315
	-	-	-	-	-	35	226	<mark>286</mark>	298	315
EXPENSES										
Operating and Administrative	-	-	-	-	-	5	14	14	14	15
Finance Expense	0	0	0	0	0	20	181	247	248	247
Depreciation and Amortization	-	-	-	-	-	6	62	85	85	85
Water Rentals and Assessments	-	-	-	-	-	2	13	15	19	20
	0	0	0	0	0	32	270	361	367	367
Net Income	(0)	(0)	(0)	(0)	(0)	2	(44)	(74)	(69)	(52)
Financial Ratios										
Debt	75%	75%	75%	75%	75%	75%	75%	76%	77%	78%

KEEYASK HYDROPOWER LIMITED PARTNERSHIP (IFF14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
Revenue	324	318	324	331	337	349	361	370	384	399
	324	318	324	331	337	349	<mark>361</mark>	370	384	399
EXPENSES										
Operating and Administrative	15	15	15	15	15	15	14	15	15	15
Finance Expense	248	246	242	240	237	234	229	225	215	209
Depreciation and Amortization	85	85	85	85	85	85	85	85	85	85
Water Rentals and Assessments	20	20	20	20	20	21	21	21	22	22
	368	366	363	360	358	355	350	346	337	332
Net Income	(44)	(48)	(38)	(29)	(21)	(6)	11	25	47	67
Financial Ratios										
Debt	78%	79%	79%	80%	80%	79%	79%	75%	75%	75%



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-65a

Section:	Tab 4, App. 4.1	Page No.:	CEF 14				
Topic:	Capital Expenditure Forecast						
Subtopic:	New Generation & Transmission Project Costs						
Issue:	Consulting & Mitigation Costs						

PREAMBLE TO IR (IF ANY):

MH financial statement note 23 states as follows:

To March 31, 2014, \$1 001 million (2013 - \$984 million) has been recorded to mitigate and compensate for all project-related impacts. These expenditures are included in the costs of the related projects and amortized over the respective remaining lives. There are other mitigation issues, the outcomes of which are not determinable at this time.

QUESTION:

In a format similar to PUB/MH I-10(b) from the 2012 GRA, provide a breakdown of payments by Community cumulative to 2008 and details for each year from 2007/08 to 2013/14, indicating pursuant to which agreement the obligation arose, to which project the costs have been capitalized, and the ongoing annual commitments under each arrangement.

RATIONALE FOR QUESTION:

The annual cost of the financial obligations are material.

RESPONSE:

Manitoba Hydro is unable to disclose the information requested as it can prejudice ongoing and future negotiations. As such, the information has been provided in confidence with the PUB.

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Section:	Tab 4, App. 4.1	Page No.:	CEF 14				
Topic:	Capital Expenditure Forecast						
Subtopic:	New Generation & Transmission Project Costs						
Issue:	Consulting & Mitigation Costs						

PREAMBLE TO IR (IF ANY):

MH financial statement note 23 states as follows:

To March 31, 2014, \$1 001 million (2013 - \$984 million) has been recorded to mitigate and compensate for all project-related impacts. These expenditures are included in the costs of the related projects and amortized over the respective remaining lives. There are other mitigation issues, the outcomes of which are not determinable at this time.

QUESTION:

Please provide a detail of payments forecast by community for the years 2014/15 to 2023/24.

RATIONALE FOR QUESTION:

The annual cost of the financial obligations are material.

RESPONSE:

Manitoba Hydro does not include in its forecast payments by community, rather information is forecasted at the aggregate level by major capital project. Please see the response to PUB/MH-I-22b that was filed in confidence with the PUB, which outlines forecasted expenditures associated with Joint Development Process & Study costs by major capital project for the period 2015-2024.

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-65e

Section:	Tab 4, App. 4.1	Page No.:	CEF 14				
Topic:	Capital Expenditure Forecast						
Subtopic:	New Generation & Transmission Project Costs						
Issue:	Consulting & Mitigation Costs						

PREAMBLE TO IR (IF ANY):

MH financial statement note 23 states as follows:

To March 31, 2014, \$1 001 million (2013 - \$984 million) has been recorded to mitigate and compensate for all project-related impacts. These expenditures are included in the costs of the related projects and amortized over the respective remaining lives. There are other mitigation issues, the outcomes of which are not determinable at this time.

QUESTION:

Please provide the forecast detailed revenue requirement impacts related to mitigation commitments for major generation transmission projects on each year of the 20 year IFF.

RATIONALE FOR QUESTION:

The annual cost of the financial obligations are material.

RESPONSE:

The following table provides the projected revenue requirement (asset amortization and liability accretion to finance expense) and cash flow impacts related to joint development, process and study costs as well as mitigation and community development commitments for major new generation and transmission projects over the 20-year forecast period to 2033/34.

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-65e

(Millions of Dollars)

		Accretion to	
	Amortization	Finance Expense	Payment*
2015	1.7	1.7	23.8
2016	1.9	2.5	9.2
2017	2.7	2.4	9.3
2018	3.2	2.3	9.4
2019	4.4	3.2	9.2
2020	5.7	3.7	9.3
2021	10.5	7.1	9.4
2022	12.3	8.3	9.4
2023	12.3	8.0	9.4
2024	12.3	7.6	8.9
2025	12.3	7.6	9.0
2026	12.3	7.5	9.0
2027	12.3	7.4	9.1
2028	12.3	7.4	9.2
2029	12.3	7.3	9.3
2030	12.3	7.2	8.1
2031	12.3	7.1	8.2
2032	12.3	7.1	7.8
2033	12.3	7.0	7.9
2034	12.3	7.0	8.0

^{*} The payment reflects the cash outlay and has no impact on projected net income.

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PUB/MH I-10

Reference: Tab 3 Consulting & Mitigation Costs

b) For the analysis in (a) please provide a breakdown of payments by community.

ANSWER:

Please see the following schedules which outline a breakdown of Joint Generation Development Agreements and Mitigation payments by community.

4) Joint Generation Deve	elopment Agreements				(in thousa	nds of dollars)
Project	Community	2008	2009	2010	2011	2012
Wuskwatim - Generation	Nisichawayasihk Cree Nation	6,276	5,551	1,390	1,427	1,400
	Cree Nation Partners (TCN/WLFN)	364	-	-	-	-
Wuskwatim - Generation Total	·	6,640	5,551	1,390	1,427	1,400
Wuskwatim Transmission	Opaskwayak Cree Nation	4	19	41	54	73
	Nisichawayasihk Cree Nation	24	111	238	317	429
	Nelson House Community Council	1	3	5	7	10
	Cormorant	4	19	41	54	73
	Snow Lake	5	25	54	72	97
	Thicket Portage	1	3	5	7	10
	Herb Lake Landing	1	3	5	7	10
Wuskwatim Transmission Total		39	181	390	518	702
Keeyask	Fox Lake Cree Nation	2,367	2,501	4,429	1,502	1,712
	Manitoba Metis Federation	-	-	25	-	16
	Nisichawayasihk Cree Nation	-	-	-	-	4
	York Factory First Nation	2,014	2,239	2,477	2,306	2,217
	Cree Nation Partners (TCN/WLFN)	7,636	13,980	10,092	5,345	6,362
Keeyask Total		12,017	18,720	17,023	9,154	10,311
Conawapa	Fox Lake Cree Nation	2,102	1,250	5,849	751	915
	Manitoba Metis Federation	-	-	25	-	16
	York Factory First Nation	929	1,150	908	575	616
	Shamattawa First Nation	100	134	327	355	329
	Cree Nation Partners (TCN/WLFN)	827	1,427	1,389	733	555
Conawapa Total		3,958	3,961	8,499	2,414	2,431
Bipole III	Fox Lake Cree Nation	-	-	-	183	615
	Manitoba Metis Federation	-	-	50	225	166
	Swampy Cree Tribal Council	-	-	-	-	15
	Swan Lake First Nation	-	-	-	-	5
	Southern Chiefs Organization	-	-	32	-	-
	Cree Nation Partners (TCN/WLFN)	-	-	40	1,636	684
Bipole III Total		-	-	122	2,044	1,486
Grand Total		22,654	28,413	27,423	15,557	16,329

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2012/13 & 2013/14 Electric General Rate Application

5) Mitigation				(in thous	ands of dollars)	
Project	Community	2008	2009	2010	2011	2012
Wuskwatim - Generation	Nisichawayasihk Cree Nation	25	7	9	14	71
	Taskinigahp Trust	269	4,571	-	-	-
Wuskwatim - Generation Total		294	4,578	9	14	71
Wuskwatim - Transmission	Nelson House	10	1	1	1	1
Wuskwatim - Transmission Total	10	1	1	ı	-	
Keeyask - Generation	Fox Lake Cree Nation	-	-	1,837	77	-
	Tataskweyak Cree Nation	-	5,383	2,437	790	1,350
	War Lake First Nation	-	404	-	-	-
	York Factory First Nation	-	-	100	300	207
Keeyask - Generation Total		-	5,786	4,374	1,166	1,558
Conawapa - Generation	Fox Lake Cree Nation	-	1	4,857	(1)	1
Conawapa - Generation Total		-	1	4,857	(1)	-
Bipole III - Transmission Line MB Metis Federation		-	1	1	1	150
Bipole III - Transmission Line Total	-	-		-	150	
Grand Total	304	10,364	9,240	1,179	1,779	

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-24d

Section:	Tab 4, App. 4.1 Page No.: CEF 14, p.3					
Topic:	Capital Expenditures					
Subtopic:	Keeyask Generating Station Project Cost					
Issue:	Revised Cost Estimates					

PREAMBLE TO IR (IF ANY):

The latest Keeyask Generating Station project cost estimate in CEF 14 is \$6.496B, the same as reported during NFAT. MH has since awarded contracts for a major portion of the work to be done on Keeyask.

QUESTION:

Provide a cost summary of mitigation obligations.

RATIONALE FOR QUESTION:

Capital costs for new generation are one of the reasons for Manitoba Hydro's rate increase requests.

RESPONSE:

The estimate for mitigation obligations is \$209M as of December 31, 2014.

The estimate includes the following:

- Environmental Mitigation
- Social Mitigation
- Adverse Effects Payment Obligation
- Operational Employment Payment Obligation



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-20b

Section:	Tab 4, App. 4.1	Page No.:	CEF 14, p.3		
Topic:	Capital Expenditures				
Subtopic:	Bipole III Project Cost				
Issue:	Current Cost Projections and Cost Risk				

PREAMBLE TO IR (IF ANY):

During the NFAT hearing, Bipole III project cost was \$3.24B, but in 2014 Manitoba Hydro revised the estimate to \$4.65B.

QUESTION:

Advise whether all land acquisition and mitigation costs for the Bipole III corridor are included in the \$4.65B estimate. If not, provide a breakdown of what is and what is not included.

RATIONALE FOR QUESTION:

This Information Request seeks to explore the risk of Bipole III cost increases, which would impact Manitoba Hydro's revenue requirement and domestic rates.

RESPONSE:

All land acquisition and compensation costs are included within the \$4.65B Control Budget for Bipole III. This Control Budget includes the project contingency.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-201

Section:	Tab 4, App. 4.1	Page No.:	CEF 14, p.3		
Topic:	Capital Expenditures				
Subtopic:	Bipole III Project Cost				
Issue:	Current Cost Projections and Cost Risk				

PREAMBLE TO IR (IF ANY):

During the NFAT hearing, Bipole III project cost was \$3.24B, but in 2014 Manitoba Hydro revised the estimate to \$4.65B.

QUESTION:

Provide a status report on contingencies/reserve and acquisition and mitigation costs.

RATIONALE FOR QUESTION:

This Information Request seeks to explore the risk of Bipole III cost increases, which would impact Manitoba Hydro's revenue requirement and domestic rates.

RESPONSE:

Contingency and reserve amounts included within the Bipole III Control Budget total \$347.6 million. Of this amount, approximately \$27.4 million has been expended as part of mitigating project risks. Therefore, approximately 92% of the project contingency and reserve fund is remaining.

Please refer to responses PUB/MH-I-20b and PUB/MH-I-20c for responses on property acquisition costs.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-17b

Section:	Tab 4:	Page No.:	
	Appendix 11.35 & 11.36		
Topic:	Capital Expenditures		
Subtopic:	Construction work in progress		
Issue:	Detail of Capital Costs		

PREAMBLE TO IR (IF ANY):

Manitoba Hydro's total capital expenditures have shown material changes and are a major driver behind requested rate increases.

QUESTION:

Please provide a breakdown of Other for Keeyask, Conawapa, and Bipole III by major component.

RATIONALE FOR QUESTION:

This Information Request seeks background information on capital cost escalation.

RESPONSE:

The 'Other' category contains costs consisting of consulting services provided by external vendors, including engineering, management and architecture; general construction and maintenance services provided by external vendors including assembly and installation; unamortized site study costs which were previously deferred and have now been re-allocated to the capital project to construct the asset; and community participation which are payments to First Nation and other communities as negotiated through formal agreements between Manitoba Hydro and these communities.

Please see below for a breakdown of 'Other' for Keeyask, Conawapa and Bipole III as of March 31, 2014.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-17b

Breakdown of Other for Major Generation and Transmission projects

227.0
237.0
217.6
53.0
35.3
13.1
7.7
7.6
3.4
2.5
4.9
582.1
4.9
2.1
0.2
7.2
91.3
11.9
10.3
8.7
12.5
8.0
142.7



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-17b

Consulting Services 25.4 Construction & Maintenance Services 20.1 Community Participation 7.3 Transport of people including charters, MV mileage 7.2 Construction related vehicles 4.4 Licenses & Fees 1.9 Site Study Costs 1.1 Other 3.0 70.4 Bipole III - Converter Stations Consulting Services 24.5 Cransport of people including charters, MV mileage 5.5 Building & Property Services 3.0 Site Study Costs 1.0 Other 4.4 Epipole III Collector Lines Construction & Maintenance Services 16.5 Land Purchases 2.8 Other 1.3 Epipole III Community Development Initiative Mitigation 53.9	Bipole III - Transmission Line	
Construction & Maintenance Services Community Participation Transport of people including charters, MV mileage Construction related vehicles 4.4 Licenses & Fees 1.9 Site Study Costs 1.1 Other 3.0 Transport of people including charters, MV mileage Site Study Costs 1.1 Other 3.0 Total Bipole III - Converter Stations Construction & Maintenance Services Consulting Services 24.5 Transport of people including charters, MV mileage Building & Property Services 3.0 Site Study Costs 1.0 Other 4.4 Bipole III Collector Lines Construction & Maintenance Services 16.5 Land Purchases Other 1.3 Bipole III Collector Lines Sipole III Community Development Initiative Mitigation 53.9		
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Building & Property Services Site Study Costs Other 4.4 195.3 Bipole III Collector Lines Construction & Maintenance Services Land Purchases Other 1.3 20.6 Bipole III Community Development Initiative Mitigation 53.9	8	5.5
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Bipole III Community Development Initiative Mitigation 53.9	Land Purchases	2.8
Bipole III Community Development Initiative Mitigation 53.9	Other	
Mitigation 53.9		
Mitigation 53.9		
	Bipole III Community Development Initiative	
	Mitigation	53.9
		53.9

Nation accounts are defined by having a Band Treaty Number listed on the customer account.

Manitoba Hydro is unable to provide the breakdown for the First Nation General Service and the First Nation Education accounts as, given the number of such customers within each community, providing this information may result in the disclosure of individual customer information.

Manitoba Hydro does not forecast future energy requirements for communities individually.

Residential Electricity Consumption for 2013/14 (kW.h)

	, ,	,
First Nation Community	Total	First Nation
Barren Lands First Nation	1,782,235	1,462,857
Chemanwawin Cree Nation	11,159,692	10,622,945
Fox Lake First Nation	1,531,025	1,399,211
Garden Hill First Nation	<mark>14,637,831</mark>	14,576,089
Gods Lake First Nation	9,096,194	9,066,548
Manto Sipi Cree Nation	<mark>4,848,110</mark>	4,749,374
Marcel Colomb First Nation	643,299	629,083
Mathias Colomb First Nation	15,379,536	14,565,347
Misipawistik Cree Nation	7,203,604	6,650,800
Mosakahiken Cree Nation	8,389,169	7,205,188
Nischawayaksihk Cree Nation	19,329,295	18,609,703
Northlands Dene First Nation	1,998,641	1,950,655
Norway House Cree Nation	<mark>42,282,510</mark>	<mark>40,162,819</mark>
O-PIPON-NA-PIWIN	7,125,945	5,581,919
Opaskwayak Cree Nation	22,937,334	21,186,903
Oxford House First Nation	(13,293,801)	<mark>12,956,292</mark>)
Pimicikamak Cree Nation	34,876,323	34,515,192
Red Sucker Lake First Nation	6,060,586	5,792,004
Sapotaweyak Cree Nation	7,833,082	7,735,762
Sayisi Dene First Nation	1,375,774	1,351,000
Shamattawa First Nation	3,410,525	3,160,087
St Theresa Point First Nation	18,325,219	17,974,396
Tataskweyak Cree Nation	15,865,100	15,262,865
War Lake First Nation	1,059,031	914,140
Wasagamack First Nation	7,379,793	7,129,918
Wuskwi Sipihk First Nation	1,632,322	1,457,076
York Factory First Nation	4,431,850	3,952,769

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General Service Electricity Consumption for 2013/14 (kW.h)

First Nation Community	Total
Barren Lands First Nation	972,744
Chemanwawin Cree Nation	3,428,440
Fox Lake First Nation	2,114,617
Garden Hill First Nation	8,963,350
Gods Lake First Nation	4,947,910
Manto Sipi Cree Nation	3,115,204
Marcel Colomb First Nation	375,983
Mathias Colomb First Nation	6,912,671
Misipawistik Cree Nation	3,175,023
Mosakahiken Cree Nation	2,621,411
Nischawayaksihk Cree Nation	9,563,676
Northlands Dene First Nation	1,224,602
Norway House Cree Nation	17,390,544
O-PIPON-NA-PIWIN	5,236,117
Opaskwayak Cree Nation	19,417,833
Oxford House First Nation	8,184,373
Pimicikamak Cree Nation	9,746,545
Red Sucker Lake First Nation	3,164,103
Sapotaweyak Cree Nation	3,417,892
Sayisi Dene First Nation	979,367
Shamattawa First Nation	1,986,975
St Theresa Point First Nation	9,980,038
Tataskweyak Cree Nation	7,327,442
War Lake First Nation	871,916
Wasagamack First Nation	5,475,011
Wuskwi Sipihk First Nation	604,078
York Factory First Nation	2,789,039

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MKO/MH I-3 a+b, f-h

WINO/WITT 1-3 a+b, 1-11	Residential Accounts				Fir	st Nation Res	idential Accoun	ts
					b) First			
	a)		g) 2013/14	h) Value in	Nation		g) 2013/14	h) Value in
	Residential	f) % of	Billed	\$ of	Residential	f) % of	Billed	\$ of
	Customers	Accounts in	Consumption	Accounts in	Customers	Accounts in	Consumption	Accounts in
Community	in Arrears	Arrears	in kW.h	Arrears	in Arrears	Arrears	in kW.h	Arrears
Barren Lands First Nation	59	43.1%	985,306	\$29,468	46	43.4%	759,459	\$20,396
Chemanwawin Cree Nation	171	52.1%	5,827,521	\$95,584	169	53.8%	5,778,402	\$94,974
Fox Lake First Nation	31	59.6%	924,634	\$9,223	26	57.8%	810,481	\$7,980
Garden Hill First Nation	368	73.9%	10,995,835	\$240,616	367	73.8%	10,961,783	\$239,816
Gods Lake First Nation	117	40.3%	3,787,909	\$55,739	117	40.8%	3,787,909	\$55,739
Manto Sipi Cree Nation	98	80.3%	4,028,584	\$590,158	97	<mark>81.5%</mark>	3,989,460	\$589,413
Marcel Colomb First Nation	*	*	*	*	*	*	*	*
Mathias Colomb First Nation	105	26.4%	3,857,920	\$68,852	104	27.3%	3,825,640	\$67,659
Misipawistik Cree Nation	122	55.5%	4,178,105	\$53,283	116	56.6%	4,036,285	\$50,122
Mosakahiken Cree Nation	146	58.4%	5,297,562	\$93,141	139	69.8%	5,104,727	\$87,962
Nischawayaksihk Cree Nation	140	27.8%	5,056,997	\$76,381	134	27.9%	4,909,583	\$71,621
Northlands Dene First Nation	61	40.7%	779,263	\$21,734	59	40.1%	750,011	\$21,249
Norway House Cree Nation	700	58.4%	25,125,379	\$356,018	700	<mark>61.8%</mark>	25,125,379	\$356,018
O-PIPON-NA-PIWIN	148	69.8%	4,694,802	\$150,019	130	76.0%	4,171,909	\$130,280
Opaskwayak Cree Nation	367	50.3%	11,710,591	\$174,316	332	50.1%	10,779,110	\$162,238
Oxford House First Nation	224	53.7%	7,664,925	\$205,021	223	<mark>54.7%</mark>	7,629,975	\$201,407
Pimicikamak Cree Nation	624	67.7%	25,406,227	\$3,594,154	<mark>621</mark>	<mark>68.0%</mark>	25,310,574	\$3,578,013
Red Sucker Lake First Nation	141	67.1%	4,088,261	\$63,252	138	70.1%	3,995,470	\$62,564
Sapotaweyak Cree Nation	99	39.4%	2,839,025	\$28,483	90	37.3%	2,640,096	\$25,209
Sayisi Dene First Nation	78	66.7%	970,815	\$19,631	76	66.7%	950,945	\$18,668
Shamattawa First Nation	74	41.3%	1,300,931	\$27,111	70	42.2%	1,219,920	\$26,741
St Theresa Point First Nation	334	58.3%	10,347,583	\$185,856	325	58.3%	10,151,931	\$178,293
Tataskweyak Cree Nation	185	48.1%	7,810,740	\$90,144	181	48.8%	7,678,067	\$86,070
War Lake First Nation	14	42.4%	444,435	\$10,591	13	44.8%	419,508	\$10,196
Wasagamack First Nation	161	60.1%	4,441,460	\$64,491	161	61.5%	4,441,460	\$64,491
Wuskwi Sipihk First Nation	24	68.6%	920,242	\$32,784	23	69.7%	,	\$32,132
York Factory First Nation	46	35.7%	1,548,329	\$32,529	44	36.7%	1,488,789	\$30,029

^{*} Denotes an insufficiently large number of customers to ensure the protection of identifiable customer information

MKO/MH I-3 c+d, f-h

IVIKO/IVIH I-3 C+0, 1-N								
		General Ser	vice Accounts		First I	Nation Gene	eral Service Acc	ounts
Community	c) General Service Customers in Arrears	f) % of Accounts in Arrears	g) 2013/14 Billed Consumption	in \$ of	Service Accounts in	f) % of	g) 2013/14 Billed Consumption in kW.h	Accounts
Barren Lands First Nation	2	4.3%	7,910		1		1,932	
Chemanwawin Cree Nation	4	11.1%	564,814					
Fox Lake First Nation	0	0.0%	304,814				175,174 0	
Garden Hill First Nation	11	22.9%	803,421			21.7%	781,116	
Gods Lake First Nation	2	3.4%	49,510			3.7%	49,510	
Manto Sipi Cree Nation	4	10.8%	232,169	\$48,693	3		125.249	
Marcel Colomb First Nation	*	*	*	*	*	*	*	*
Mathias Colomb First Nation	1	2.3%	16,333	\$39	1	3.2%	16,333	\$39
Misipawistik Cree Nation	3	9.7%	339,467		3		339,262	
Mosakahiken Cree Nation	2	9.1%	97,694		*	*	*	*
Nischawayaksihk Cree Nation	14	16.1%	1,649,010			16.7%	1,640,572	\$11,014
Northlands Dene First Nation	4	7.4%	8,517	\$1,013		9.1%	8,517	\$1,013
Norway House Cree Nation	12	10.3%	726,428			12.2%	702,043	\$11,270
O-PIPON-NA-PIWIN	9	22.5%	1,488,913	\$180,593	*	*	*	*
Opaskwayak Cree Nation	14	15.7%	2,956,316	\$26,779	11	18.6%	2,116,412	\$19,459
Oxford House First Nation	6	12.0%	1,049,478	\$161,799	6	14.0%	1,049,478	\$161,799
Pimicikamak Cree Nation	11	12.5%	975,851	\$92,606	10	12.0%	957,839	\$92,412
Red Sucker Lake First Nation	8	22.9%	269,514	\$9,748	8	38.1%	269,514	\$9,748
Sapotaweyak Cree Nation	4	14.3%	113,768	\$405	3	11.1%	107,163	\$300
Sayisi Dene First Nation	4	10.3%	16,701	\$3,553	2	6.7%	10,542	\$2,708
Shamattawa First Nation	5	11.1%	163,817	\$245,304	5	16.7%	163,817	\$245,304
St Theresa Point First Nation	3	3.4%	334,345	\$998	2	2.7%	297,001	\$213
Tataskweyak Cree Nation	18	28.1%	1,893,771	\$37,766	18	33.3%	1,893,267	\$37,766
War Lake First Nation	*	*	*	*	0	0.0%	504	\$0
Wasagamack First Nation	3	6.5%	183,530	\$2,404	2	5.0%	163,130	
Wuskwi Sipihk First Nation	*	*	*	*	3	27.3%	142,258	\$13,529
York Factory First Nation	2	7.7%	119,417	\$1,473	*	*	*	*

^{*} Denotes an insufficiently large number of customers to ensure the protection of identifiable customer information

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Section:	Tab 3: Appendix 3.5	Page No.:	1		
Topic:	Integrated Financial Forecast & Economic Outlook				
Subtopic:	Projected Rate Increase				
Issue:	Rate increase Alternative Scenarios				

PREAMBLE TO IR (IF ANY):

Manitoba Hydro is forecasting a deterioration of its strength with projected operating losses of almost \$980 million during the forecast period.

QUESTION:

Please discuss the operating cost containment options, in priority order, that Manitoba Hydro would have to employ to eliminate 100% of the forecast deficit.

RATIONALE FOR QUESTION:

To gain an understanding of how such an operating deficit can be avoided, additional scenarios are required.

RESPONSE:

Over the 10 year forecast period Manitoba Hydro is projecting losses of approximately \$900 million. As demonstrated in figure 5.5.12 (Appendix 5.5, page 14), approximately 77% of OM&A costs incurred by the corporation are for salaries, overtime and benefits and as such a significant reduction in staffing levels would be necessary in order to eliminate 100% of the forecast deficit.

The following table provides the annual EFT reductions necessary to reduce these losses for illustrative purposes only. The total reduction over the 10 year period totals over 2400 EFTs which represents a reduction of approximately 38% of the total workforce or 57% of staff required for operations & maintenance and governance, support and services functions. Staff reductions of this magnitude are not plausible as and would impair the Corporation's ability to provide safe and reliable service.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-7a

ANALYSIS OF EFT REDUCTIONS TO ELIMINATE FORECASTED LOSSES (in millions of dollars)																
For the year ended March 31	2015		2016		2017		2018		2019		2020	2021	2022	2023	2024	Total
Required annual reduction to OM&A	-	\$	20	\$	41	\$	64	\$	90	\$	117	\$ 146	\$ 177	\$ 209	\$ 243	
Number of EFTs to eliminate losses	-		196		212		236		250		273	288	313	321	341	2,430
% of Total Straight Time EFTs																38%
% of Total Operations & Maintenance /Govenance and Support Services EFTs																57%



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Section:	Tab 3: Appendix 3.5	Page No.:	1					
Topic:	Integrated Financial Forecast & Economic Outlook							
Subtopic:	Projected Rate Increase							
Issue:	Rate increase Alternative Scenarios							

PREAMBLE TO IR (IF ANY):

Manitoba Hydro is forecasting a deterioration of its strength with projected operating losses of almost \$980 million during the forecast period.

QUESTION:

Please indicate the equal annual rate increases required to meet 100% of the net losses forecasted in the next 10 years. Please provide the IFF reflecting this scenario.

RATIONALE FOR QUESTION:

To gain an understanding of how such an operating deficit can be avoided, additional scenarios are required.

RESPONSE:

The projected losses in MH14 to 2013/24 are \$900 million. The equal annual rate increase required to eliminate the net losses forecasted in the next 10 years is 5.30% beginning in 2015/16. Projected financial statements reflecting these rate increases are attached.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-7b

ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1,437	1,454	1,460	1,483	1,490	1,501	1,506	1,513	1,525	1,538
a <mark>dditional</mark> *	0	<mark>77</mark>	159	248	342	442	547	659	781	<mark>910</mark>
BPIII Reserve Account	(30)	(33)	(35)	(37)	(12)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1,831	1,947	2,048	2,165	2,314	2,473	2,885	3,132	3,280	3,451
EXPENSES										
Operating and Administrative	486	542	552	557	571	585	601	607	619	631
Finance Expense	495	510	545	577	743	871	1,168	1,289	1,284	1,283
Depreciation and Amortization	405	401	422	445	521	523	612	665	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	145	146	153	154	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3
	1,754	1,824	1,954	2,040	2,308	2,454	2,895	3,115	3,193	3,237
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	135	102	133	<mark>11</mark>	<mark>23</mark>	<mark>0</mark>	<mark>17</mark>	86	210
* Additional General Consumers Revenue										
Percent Increase	0.00%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%
Cumulative Percent Increase	0.00%	5.30%	10.88%	16.76%	22.95%	29.47%	36.33%	43.55%	51.16%	<mark>59.18%</mark>
Financial Ratios										
Equity	22%	18%	17%	16%	15%	15%	14%	14%	14%	15%
Interest Coverage	1.16	1.19	1.12	1.13	1.01	1.02	1.00	1.01	1.07	1.16
Capital Coverage	0.98	1.05	1.01	1.22	1.07	1.06	<mark>1.12</mark>	1.34	1.58	1.80



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-7b

ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service	17,163	17,912	19,127	19,988	24,957	28,333	33,202	33,846	34,478	35,142
Accumulated Depreciation	(5,676)	(6,012)	(6,392)	(6,795)	(7,270)	(7,798)	(8,403)	(9,055)	(9,721)	(10,401)
Net Plant in Service	11,487	11,900	12,735	13,193	17,687	20,535	24,800	24,791	24,757	24,741
Construction in Progress	3,257	4,932	6,755	8,982	6,040	3,939	169	185	241	263
Current and Other Assets	1,798	1,570	1,822	2,268	2,294	2,596	2,726	2,167	2,286	2,432
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	278	313	352	396	420	434	431	416	398
	16,993	18,866	21,800	24,961	26,584	27,666	28,298	27,727	27,836	27,955
LIABILITIES AND EQUITY										
Long-Term Debt	11,705	13,808	16,481	18,489	20,977	21,506	22,192	22,155	22,450	22,241
Current and Other Liabilities	2,016	2,131	2,233	3,136	2,178	2,679	2,653	2,133	1,831	1,912
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	82	116	153	165	110	55	-	-	-
Retained Earnings	2,717	2,798	2,900	3,032	3,044	3,066	3,066	3,083	3,170	3,380
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)
	16,993	18,866	21,800	24,961	26,584	27,666	28,298	27,727	27,836	27,955
		,	,	,	,	,			,	



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-7b

ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT (In Millions of Dollars)

For the	vear er	ded N	//arch	31

Tor the year ended march of	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING ACTIVITIES										
Cash Receipts from Customers	1,859	1,977	2,080	2,200	2,323	2,470	2,882	3,129	3,278	3,448
Cash Paid to Suppliers and Employees	(803)	(871)	(942)	(973)	(1,000)	(1,015)	(1,070)	(1,101)	(1,127)	(1,155)
Interest Paid	(511)	(514)	(543)	(588)	(774)	(912)	(1,199)	(1,131)	(1,127)	(1,279)
Interest Received	13	15	21	30	35	34	31	28	15	16
110/05/11050/100	558	607	616	670	585	578	644	743	886	1,030
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1,953	2,390	2,990	3,200	2,790	1,400	1,390	400	560	180
Sinking Fund Withdrawals	110	21	_	7	448	203	291	715	165	19
Retirement of Long-Term Debt	(800)	(312)	(334)	(330)	(1,195)	(315)	(850)	(718)	(441)	(290)
Other	`(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
	1,218	2,077	2,636	2,857	2,013	1,269	730	372	243	(123)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1,900)	(2,518)	(3,134)	(3,244)	(2,253)	(1,550)	(1,010)	(756)	(698)	(697)
Sinking Fund Payment	(125)	(202)	(168)	(243)	(240)	(243)	(261)	(358)	(244)	(249)
Other	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
	(2,046)	(2,742)	(3,323)	(3,508)	(2,514)	(1,828)	(1,301)	(1,144)	(973)	(976)
Net Increase (Decrease) in Cash	(270)	(58)	(70)	18	83	19	73	(29)	157	(69)
Cash at Beginning of Year	133	(137)	(195)	(265)	(247)	(164)	(145)	(72)	(101)	56
Cash at End of Year	(137)	(195)	(265)	(247)	(164)	(145)	(72)	(101)	56	(13)



Section:	Tab 3: Appendix 3.5	Page No.:	1						
Topic:	Integrated Financial Forecast & Economic Outlook								
Subtopic:	Projected Rate Increase								
Issue:	Rate increase Alternative Scenarios								

PREAMBLE TO IR (IF ANY):

Manitoba Hydro is forecasting a deterioration of its strength with projected operating losses of almost \$980 million during the forecast period.

QUESTION:

Please indicate the equal annual increases to meet 50% of the projected net loss forecast in the next 10 years. Please provide the IFF reflecting the scenario.

RATIONALE FOR QUESTION:

To gain an understanding of how such an operating deficit can be avoided, additional scenarios are required.

RESPONSE:

The projected losses in MH14 to 2023/24 are \$900 million. To reduce these losses by 50% to approximately \$450 million, the projected even annual rate increases required in the next 10 years from 2015/16 to 2023/24 is 4.44%. The projected financial statements reflecting these rates are attached.



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-7c

ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
·	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1 437	1 454	1 460	1 483	1 490	1 501	1 506	1 513	1 525	1 538
additional*	0	<mark>65</mark>	132	206	283	364	448	537	633	<mark>735</mark>
BPIII Reserve Account	(30)	(33)	(34)	(36)	(11)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 934	2 022	2 124	2 255	2 394	2 786	3 010	3 133	3 276
EXPENSES										
Operating and Administrative	486	542	552	557	571	585	601	607	619	631
Finance Expense	495	510	546	580	748	880	1 184	1 312	1 315	1 325
Depreciation and Amortization	405	401	422	445	521	524	612	666	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	144	145	152	152	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3
	1 754	1 824	1 955	2 042	2 313	2 464	2 911	3 137	3 222	3 279
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	123	75	89	<mark>(53)</mark>	(66)	<mark>(115)</mark>	(127)	(90)	<mark>(7)</mark>
* Additional General Consumers Revenue										
Percent Increase	0.00%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%
Cumulative Percent Increase	0.00%	4.44%	9.07%	13.91%	18.96%	24.24%	29.75%	35.50%	41.51%	<mark>47.79%</mark>
Financial Ratios										
Equity	22%	18%	16%	15%	14%	14%	13%	12%	11%	12%
Interest Coverage	1.16	1.17	1.09	1.09	0.95	0.95	0.91	0.90	0.93	0.99
Capital Coverage	0.98	1.03	0.97	1.14	0.94	0.89	0.93	1.08	1.26	1.42



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-7c

ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET (In Millions of Dollars)

For the year ended March 31										
•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service Accumulated Depreciation	17 163 (5 676)	17 912 (6 012)	19 127 (6 392)	19 988 (6 795)	24 957 (7 270)	28 333 (7 798)	33 202 (8 403)	33 846 (9 055)	34 478 (9 721)	35 142 (10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress Current and Other Assets Goodwill and Intangible Assets Regulated Assets	3 257 1 798 198 254	4 932 1 570 186 278	6 755 1 822 175 313	8 982 2 268 166 352	6 040 2 295 166 396	3 939 2 597 177 420	169 2 726 168 434	185 2 167 152 431	241 2 235 137 416	263 2 438 121 398
	16 993	18 866	21 801	24 961	26 585	27 668	28 298	27 727	27 785	27 962
LIABILITIES AND EQUITY										
Long-Term Debt Current and Other Liabilities Contributions in Aid of Construction BPIII Reserve Account Retained Earnings Accumulated Other Comprehensive Income	11 705 2 016 412 49 2 717 94	13 808 2 144 446 81 2 785 (399)	16 681 2 073 480 115 2 860 (409)	18 689 3 020 514 152 2 949 (363)	21 177 2 128 549 163 2 896 (328)	21 706 2 718 583 109 2 830 (278)	22 592 2 605 618 54 2 715 (287)	22 555 2 228 654 - 2 588 (298)	23 050 1 852 690 - 2 498 (305)	23 041 2 007 727 - 2 491 (305)
	16 993	18 866	21 801	24 961	26 585	27 668	28 298	27 727	27 785	27 962



Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-I-7c

ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT (In Millions of Dollars)

For the year	ended	March	31
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Property Property	For the year ended warch 31										
Cash Receipts from Customers 1 859 1 965 2 054 2 158 2 264 2 392 2 783 3 007 3 130 3 273 Cash Paid to Suppliers and Employees (803) (871) (942) (973) (1 000) (1 015) (1 069) (1 100) (1 125) (1 155) Interest Paid (511) (514) (543) (593) (784) (923) (1 211) (1 336) (1 311) (1 321) Interest Received 13 15 21 30 35 34 31 28 15 16 558 594 590 622 515 488 534 600 710 813 FINANCING ACTIVITIES Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 790 1 400 1 590 400 760 380 Sinking Fund Withdrawals 1 10 21 - 7 448 204 293 715 165 24 Retirement of Long		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Cash Paid to Suppliers and Employees (803) (871) (942) (973) (1 000) (1 015) (1 069) (1 100) (1 125) (1 155) Interest Paid (511) (514) (543) (593) (784) (923) (1 211) (1 336) (1 311) (1 321) Interest Received 13 15 21 30 35 34 31 28 15 16 558 594 590 622 515 488 534 600 710 813 FINANCING ACTIVITIES Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 790 1 400 1 590 400 760 380 Sinking Fund Withdrawals 1 10 21 - 7 448 204 293 715 165 24 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other	OPERATING ACTIVITIES										
Cash Paid to Suppliers and Employees (803) (871) (942) (973) (1 000) (1 015) (1 069) (1 100) (1 125) (1 155) Interest Paid (511) (514) (543) (593) (784) (923) (1 211) (1 336) (1 311) (1 321) Interest Received 13 15 21 30 35 34 31 28 15 16 558 594 590 622 515 488 534 600 710 813 FINANCING ACTIVITIES Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 790 1 400 1 590 400 760 380 Sinking Fund Withdrawals 1 10 21 - 7 448 204 293 715 165 24 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other	Cash Receipts from Customers	1 859	1 965	2 054	2 158	2 264	2 392	2 783	3 007	3 130	3 273
Interest Paid (511) (514) (543) (593) (784) (923) (1211) (1336) (1311) (1321) Interest Received 13 15 21 30 35 34 31 28 15 16 16 18 18 18 18 18 18	·	(803)	(871)	(942)	(973)	(1 000)		(1 069)	(1 100)	(1 125)	
Interest Received 13 15 21 30 35 34 31 28 15 16 16 1558 594 590 622 515 488 534 600 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 710 813 810		, ,	` '	(543)		, ,	, ,	, ,	(1 336)	, ,	
FINANCING ACTIVITIES Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 790 1 400 1 590 400 760 380 Sinking Fund Withdrawals 110 21 - 7 448 204 293 715 165 24 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other (45) (22) (20) (20) (20) (30) (19) (101) (25) (41) (32) 1218 2 077 2 836 2 857 2 013 1 269 932 372 443 82 INVESTING ACTIVITIES Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697) Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other	Interest Received							` 31 [°]		` 15 [°]	
Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 790 1 400 1 590 400 760 380 Sinking Fund Withdrawals 110 21 - 7 448 204 293 715 165 24 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) INVESTING ACTIVITIES Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697) Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21) (21) (21) (21) (21) (21) (21) (21) (21)		558	594	590	622	515	488	534	600	710	813
Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 790 1 400 1 590 400 760 380 Sinking Fund Withdrawals 110 21 - 7 448 204 293 715 165 24 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) INVESTING ACTIVITIES Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697) Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21) (21) (21) (21) (21) (21) (21) (21) (21)	FINANCING ACTIVITIES										
Sinking Fund Withdrawals 110 21 - 7 448 204 293 715 165 24 Retirement of Long-Term Debt (800) (312) (334) (330) (1195) (315) (850) (718) (441) (290) Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) INVESTING ACTIVITIES 1 218 2 077 2 836 2 857 2 013 1 269 932 372 443 82 Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697) Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21) (21) (21) (21) (21) (21) (21) (21) (21) (21) (21) (21) (21)		1 953	2 390	3 190	3 200	2 790	1 400	1 590	400	760	380
Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) INVESTING ACTIVITIES 1 218 2 077 2 836 2 857 2 013 1 269 932 372 443 82 Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697) Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21)		110	21	-	7	448	204	293	715	165	24
Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) 1 218 2 077 2 836 2 857 2 013 1 269 932 372 443 82 INVESTING ACTIVITIES Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697) Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21)	_	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
1 218 2 077 2 836 2 857 2 013 1 269 932 372 443 82	_	(45)		(20)				(101)			
Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697) Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21) (21) (21) (21) (21) (21) (35) (30) (30) (30) (30)		1 218	2 077	2 836	2 857	2 013	1 269	932	372	443	
Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21) (21) (21) (21) (21) (35) (30) (30) (30) (30)	INVESTING ACTIVITIES										
Sinking Fund Payment (125) (202) (168) (243) (241) (244) (261) (358) (249) (255) Other (21) (21) (21) (21) (21) (35) (30) (30) (30) (30)	Property, Plant and Equipment, net of contributions	(1 900)	(2 518)	(3 134)	(3 244)	(2 253)	(1 550)	(1 010)	(756)	(698)	(697)
Other (21) (21) (21) (21) (35) (30) (30) (30)	Sinking Fund Payment	, ,	,	, ,	, ,	,	. ,	, ,	(358)	, ,	
	Other	(21)		(21)		(21)		(30)			
		(2 046)	(2 742)	(3 323)	(3 508)	(2 515)	(1 829)	(1 301)	(1 144)	(978)	
Net Increase (Decrease) in Cash (270) (71) 103 (29) 12 (72) 165 (172) 175 (88)	Net Increase (Decrease) in Cash	(270)	(71)	103	(29)	12	(72)	165	(172)	175	(88)
Cash at Beginning of Year 133 (137) (208) (105) (134) (122) (193) (28) (201) (26)											
Cash at End of Year (137) (208) (105) (134) (122) (193) (28) (201) (26) (114)	Cash at End of Year	(137)	(208)	(105)	(134)	(122)	(193)	(28)	(201)		



Section:	Tab 3: Appendix 3.5	Page No.:	1						
Topic:	Integrated Financial Forecast & Economic Outlook								
Subtopic:	Projected Rate Increase								
Issue:	Rate increase Alternative Scenarios								

PREAMBLE TO IR (IF ANY):

Manitoba Hydro is forecasting a deterioration of its strength with projected operating losses of almost \$980 million during the forecast period.

QUESTION:

Please indicate the equal annual increases to meet 75% of the projected net loss forecasted in the next 10 years. Please provide the IFF reflecting the scenario.

RATIONALE FOR QUESTION:

To gain an understanding of how such an operating deficit can be avoided, additional scenarios are required.

RESPONSE:

The projected losses in MH14 to 2023/24 are \$900 million. To reduce these losses by 75% to approximately \$225 million, the projected even annual rate increases required in the next 10 years from 2015/16 to 2023/24 is 4.78%. Projected financial statements reflecting these rates are attached.

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ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT (In Millions of Dollars)

For the year ended March 31										
·	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1 437	1 454	1 460	1 483	1 490	1 501	1 506	1 513	1 525	1 538
additional*	0	70	143	223	306	395	487	585	691	803
BPIII Reserve Account	(30)	(33)	(34)	(37)	(11)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 939	2 033	2 140	2 278	2 425	2 824	3 057	3 191	3 344
EXPENSES										
Operating and Administrative	486	542	552	557	571	585	601	607	619	631
Finance Expense	495	510	546	579	745	877	1 178	1 303	1 302	1 308
Depreciation and Amortization	405	401	422	445	521	524	612	666	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	144	145	152	153	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3
	1 754	1 824	1 955	2 041	2 311	2 460	2 905	3 128	3 210	3 262
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	128	85	106	(<mark>27)</mark>	(31)	(70)	<mark>(70)</mark>	(20)	79
* Additional General Consumers Revenue										
Percent Increase	0.00%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%
Cumulative Percent Increase	0.00%	4.78%	9.79%	15.03%	20.53%	26.29%	32.33%	38.65%	45.28%	52.23%
Financial Ratios										
Equity	22%	18%	17%	16%	15%	14%	14%	12%	12%	13%
Interest Coverage	1.16	1.18	1.10	1.10	0.98	0.97	0.95	0.95	0.98	1.06
Capital Coverage	0.98	1.04	0.98	1.17	0.99	0.96	1.00	1.18	1.39	1.58
r 										



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET (In Millions of Dollars)

For the year ended March 31										
•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service	17 163	17 912	19 127	19 988	24 957	28 333	33 202	33 846	34 478	35 142
Accumulated Depreciation	(5 676)	(6 012)	(6 392)	(6 795)	(7 270)	(7 798)	(8 403)	(9 055)	(9 721)	(10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress	3 257	4 932	6 755	8 982	6 040	3 939	169	185	241	263
Current and Other Assets	1 798	1 570	1 822	2 268	2 295	2 597	2 726	2 167	2 233	2 435
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	278	313	352	396	420	434	431	416	398
	16 993	18 866	21 801	24 961	26 585	27 667	28 298	27 727	27 783	27 959
LIABILITIES AND EQUITY										
Long-Term Debt	11 705	13 808	16 681	18 689	20 977	21 706	22 392	22 355	22 650	22 641
Current and Other Liabilities	2 016	2 139	2 057	2 987	2 268	2 624	2 667	2 233	1 985	2 054
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	81	116	152	164	109	55	_	-	_
Retained Earnings	2 717	2 790	2 876	2 982	2 955	2 924	2 854	2 783	2 763	2 842
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)
	16 993	18 866	21 801	24 961	26 585	27 667	28 298	27 727	27 783	27 959



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT (In Millions of Dollars)

For the	year	enaea	March	31

OPERATING ACTIVITIES Cash Receipts from Customers 1 859 1 970 2 065 2 174 2 287 2 423 2 822 3 055 3 188 3 341 Cash Paid to Suppliers and Employees (803) (871) (942) (973) (1 000) (1 015) (1 070) (1 100) (1 126) (1 155) Interest Paid (511) (514) (543) (592) (779) (917) (1 209) (1 326) (1 297) (1 299) Interest Received 13 15 21 30 35 34 31 28 15 16 558 599 600 640 543 525 574 657 780 902 FINANCING ACTIVITIES Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 590 1 600 1 390 400 560 380 Sinking Fund Withdrawals 110 21 - 7 448 203 292 715 165
Cash Paid to Suppliers and Employees (803) (871) (942) (973) (1000) (1015) (1070) (1100) (1126) (1155) Interest Paid (511) (514) (543) (592) (779) (917) (1209) (1326) (1297) (1298) Interest Received 13 15 21 30 35 34 31 28 15 16 558 599 600 640 543 525 574 657 780 902 FINANCING ACTIVITIES Proceeds from Long-Term Debt 1953 2390 3190 3200 2590 1600 1390 400 560 380 Sinking Fund Withdrawals 110 21 - 7 448 203 292 715 165 22 Retirement of Long-Term Debt (800) (312) (334) (330) (1195) (315) (850) (718) (441) (290 Other (45) (22) (20) (20) (20) (30) (19) (101) (25) (41) (32 Interest Received (45) (22) (27) (2836 2857 1813 1469 731 372 243 80) INVESTING ACTIVITIES
Interest Paid (511) (514) (543) (592) (779) (917) (1 209) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 298) (1 2
Interest Paid (511) (514) (543) (592) (779) (917) (1 209) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 326) (1 297) (1 299) (1 298) (1 2
FINANCING ACTIVITIES Proceeds from Long-Term Debt 1953 2390 3190 3200 2590 1600 1390 400 560 380 Sinking Fund Withdrawals 1110 21 - 7 448 203 292 715 165 22 Retirement of Long-Term Debt (800) (312) (334) (330) (1195) (315) (850) (718) (441) (290 Other (45) (22) (20) (20) (20) (30) (19) (101) (25) (41) (32 I 218 2077 2836 2857 1813 1469 731 372 243 80 INVESTING ACTIVITIES
FINANCING ACTIVITIES Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 590 1 600 1 390 400 560 380 Sinking Fund Withdrawals 110 21 - 7 448 203 292 715 165 22 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290 (45) (22) (20) (20) (20) (30) (19) (101) (25) (41) (32 (12) (21) (21) (21) (22) (23) (23) (23) (23) (23) (23) (23
Proceeds from Long-Term Debt 1 953 2 390 3 190 3 200 2 590 1 600 1 390 400 560 380 Sinking Fund Withdrawals 110 21 - 7 448 203 292 715 165 22 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290 Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32 INVESTING ACTIVITIES INVESTING ACTIVITIES 1218 2 077 2 836 2 857 1 813 1 469 731 372 243 80
Sinking Fund Withdrawals 110 21 - 7 448 203 292 715 165 22 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) INVESTING ACTIVITIES
Sinking Fund Withdrawals 110 21 - 7 448 203 292 715 165 22 Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290) Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) INVESTING ACTIVITIES
Retirement of Long-Term Debt (800) (312) (334) (330) (1 195) (315) (850) (718) (441) (290 (290) (200) (300) (190) (101) (250) (410) (320 (290) (
Other (45) (22) (20) (20) (30) (19) (101) (25) (41) (32) (1218 2 077 2 836 2 857 1 813 1 469 731 372 243 80 INVESTING ACTIVITIES
1 218 2 077 2 836 2 857 1 813 1 469 731 372 243 80 INVESTING ACTIVITIES
Property, Plant and Equipment, net of contributions (1 900) (2 518) (3 134) (3 244) (2 253) (1 550) (1 010) (756) (698) (697)
Sinking Fund Payment (125) (202) (168) (243) (240) (244) (261) (358) (247) (252)
Other (21) (21) (21) (21) (35) (30) (30) (30)
(2 046) (2 742) (3 323) (3 508) (2 515) (1 829) (1 301) (1 144) (976) (979)
Net Increase (Decrease) in Cash (270) (66) 114 (12) (159) 166 5 (116) 47 3
Cash at Beginning of Year 133 (137) (203) (89) (100) (259) (94) (89) (205) (158
Cash at End of Year (137) (203) (89) (100) (259) (94) (89) (205) (158) (155)



Section:	Tab 3: Appendix 3.5	Page No.:	PUB/MH I-7a,b,c								
Topic:	Integrated Financial Forecast & Economic Outlook										
Subtopic:	Projected Rate Increase	Projected Rate Increase									
Issue:	Rate Increases Alternative Scenarios										

PREAMBLE TO IR (IF ANY):

The analysis provided does not address the full \$978 million in forecast losses. MH is forecasting losses of \$52 million in 2025 and \$24 million in 2026.

QUESTION:

- a) Please update the response to a, b,& c to include the full 20 year forecast, including the forecast losses in years 2025 and 2026.
- b) Please provide an update to PUB/MH I-7(a) and PUB/MH I-7 (b) assuming 50% of the forecast shortfall is recovered from reduced operating expenses over the next ten years. Please file the analysis for the full 20 year forecast.
- c) Provide an update to PUB/MH I-7(a) and PUB/MH I-7 (c) assuming 25% of the forecast shortfall is recovered from reduced operating expenses over the next 10 years. Please file the analysis for the full 20 year forecast.

RATIONALE FOR QUESTION:

To assess the impact of different assumptions on MH's operating deficit.

RESPONSE:

The attached tables provide a summary of the rate increase and/or OM&A reduction scenarios that would be necessary to mathematically eliminate all or a portion of the cumulative net losses in MH14.

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Manitoba Hydro 2014/15 & 2015/16 General Rate Application

As discussed in Appendix 5.5 (page 2), the Corporation is implementing a number of cost containment initiatives which focus primarily on the reduction of approximately 330 operational positions in order to achieve the committed 1% average annual increase in OM&A costs over the 2014/15 through 2016/17 period. While these reductions assist the Corporation in meeting its OM&A targets through to 2016/17, Manitoba Hydro will be reviewing other options, including additional EFT reductions in order to meet the OM&A targets forecasted in MH14 beyond 2016/17. It is estimated that approximately 595 additional EFT reductions would be necessary to achieve the OM&A targets in MH14 through to 2023/24. These reductions assume wage and salary increases of 3.5% annually, consistent with historical collective agreements, merit and progression of staff.

The EFT reductions that would be necessary to absorb all or a portion of the forecasted losses are in addition to the estimated 900 plus EFT reductions required to meet the OM&A targets in MH14 over the next ten years. The EFT reductions provided in the attached table are for illustrative purposes only. These reductions combined with the reductions necessary to meet the OM&A targets in MH14 are not plausible as they would impair the Corporation's ability to provide safe and reliable service.

Projected financial statements corresponding to each scenario are also provided below.

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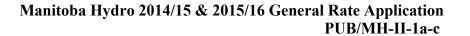


IR Response	Cumulative Net Losses	8	Reductions Achieved through	Even Annual Rate Increases 2016-2024		Additional EFT Reductions 2016-2024 to absorb losses			1
PUB/MH-I-7a	\$900 million to 2024	100% reduction in losses	100% O&M	-	926	2 528*	3 454	53%*	81%*
PUB/MH-I-7b	\$900 million to 2024	100% reduction in losses	100% rate increases	5.30%		-		-	-
PUB/MH-I-7c	\$450 million to 2024	50% reduction in losses	100% rate increases	4.44%		-		-	-
PUB/MH-II-1a(i)	\$980 million to 2026	100% reduction in losses	100% O&M	-	926	2 528*	3 454	53%*	81%*
PUB/MH-II-1a(ii)	\$980 million to 2026	100% reduction in losses	100% rate increases	no change from PUB/MH-I-7b		-		-	-
				no change from					
PUB/MH-II-1a(iii)	\$490 million to 2026	50% reduction in losses	100% rate increases	PUB/MH-I-7c		-		-	-
PUB/MH-II-1b	\$980 million to 2026	100% reduction in losses	50% O&M/50% rate increases	4.64%	926	1 139	2 065	3 <mark>2%</mark>	48%
PUB/MH-II-1c	\$490 million to 2026	50% reduction in losses	50% O&M/50% rate increases	<mark>4.19%</mark>	926	397	1 323	20%	31%

^{*} PUB/MH-I-7a EFT reduction has been revised due to inflationary increases that were inadvertently removed in the original response.

PUB/MH II-1a(i): 100% of the losses, 100% covered b reducing EFTs											
ANALYS	<mark>IS OF EFT</mark>			-	-	<mark>RECASTEI</mark>) LOSSES	•			
(in millions of dollars)											
For the year ended March 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
EFT reductions to achieve approved MH14											
OM&A Targets in test years	146	91	94								331
Projected EFT reductions to achieve approved											
MH14 OM&A Targets from 2018-2024				95	100	100	100	65	65	70	595
										_	926
Required annual reduction to OM&A to cover											
100% of losses	- \$		40 5			121 \$	153 \$	188 \$	226 \$	268	
EFT reductions to eliminate 100% of losses	-	190	207	232	261	285	297	324	353	378	2 528
Total EFT Reductions to meet MH14 targets and	1.46	201	201	225	261	205	205	200	410	4.40	2 454
eliminate losses	146	281	301	327	361	385	397	389	418	448	3 454
0/ of Total Straight Time FFTs											53%
% of Total Straight Time EFTs											33%
% of Total Operations & Maintenance											
/Govenance and Support Services EFTs											81%

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PUB/MH II-1b: 100% of the losses, 50% coverd by reducing EFTs ANALYSIS OF EFT REDUCTIONS TO ELIMINATE FORECASTED LOSSES (in millions of dollars) For the year ended March 31 2015 2016 2017 2018 2019 2020 2021 2022 2023 **2024** Total EFT reductions to achieve approved MH14 OM&A Targets in test years 146 91 94 331 Projected EFT reductions to achieve approved MH14 OM&A Targets from 2018-2024 95 100 100 65 65 70 100 926 Required annual reduction to OM&A 10 \$ 21 \$ 33 \$ 45 \$ 59 \$ 73 \$ 89 \$ 104 \$ 121 EFT reductions to eliminate losses 121 135 143 143 148 1 139 116 211 221 229 235 2 065 Total EFT Reductions 146 190 200 208 208 218 % of Total Straight Time EFTs 32% % of Total Operations & Maintenance /Govenance and Support Services EFTs 48%

PUB/MH-II-1c:	50% of the losses	50% covered by	v reducing EFTs
I OD/IVIII II IC.	JOTO OT THE HOSSES	, Joyo Co vereu o	y reducing Li 15

ANALYSI	S OF EFT	ΓRI	EDUC	ГΙΟ	NS TO	ΟЕ	LIMI	NA	TE FO	RE	CAST	ΈD	LOSS	SES				
			,	(in ı	million	s of	f dolla	rs)										
For the year ended March 31	2015		2016		2017		2018		2019		2020		2021		2022	2023	2024	Total
EFT reductions to achieve approved MH14																		
OM&A Targets in test years	146		91		94													331
EFT reductions to achieve existing 1% target																		
increases in MH14							95		100		100		100		65	65	70	595
																	-	926
Required annual reduction to OM&A	_	\$	4	\$	7	\$	12	\$	16	\$	21	\$	26	\$	31	\$ 36	\$ 42	
EFT reductions to eliminate losses	-		35		37		41		42		45		47		49	49	51	397
Total EFT Reductions	146		126		131		136		142		145		147		114	114	121	1 323
% of Total Straight Time EFTs																		20%
% of Total Operations & Maintenance																		
/Govenance and Support Services EFTs																		31%



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

PUB/MH-II-1a (i): 100% of the losses reduced, 100% covered by OM&A reductions (In Millions of Dollars)

For the year ended March 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1 437	1 454	1 460	1 483	1 490	1 501	1 506	1 513	1 525	1 538
additional*	0	57	118	183	250	321	394	471	554	641
BPIII Reserve Account	(30)	(32)	(34)	(36)	(11)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 928	2 008	2 101	2 222	2 352	2 732	2 944	3 054	3 182
EXPENSES										
Operating and Administrative	486	523	511	493	479	463	447	418	393	363
Finance Expense	495	510	545	577	743	871	1 168	1 289	1 284	1 283
Depreciation and Amortization	405	401	422	445	521	524	613	667	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	145	146	153	154	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3_
	1 754	1 804	1 914	1 975	2 217	2 333	2 742	2 927	2 966	2 969
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	135	102	133	11	23	(0)	<mark>17</mark>	86	210
* Additional General Consumers Revenue										
Percent Increase	0.00%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	0.00%	3.95%	8.06%	12.32%	16.76%	21.37%	26.17%	31.15%	36.33%	41.72%
Financial Ratios										
Equity	22%	18%	17%	16%	15%	15%	14%	14%	14%	15%
Interest Coverage	1.16	1.19	1.12	1.13	1.01	1.02	1.00	1.01	1.07	1.16
Capital Coverage	0.98	1.05	1.01	1.22	1.07	1.06	1.13	1.34	1.57	1.80



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

PUB/MH-II-1a (i): 100% of the losses reduced, 100% covered by OM&A reductions (In Millions of Dollars)

For the year ended March 31	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
General Consumers										
at approved rates	1 551	1 565	1 580	1 593	1 607	1 624	1 641	1 659	1 677	1 696
additional*	734	832	935	1 043	1 157	1 280	1 409	1 486	1 566	1 649
BPIII Reserve Account	0	0	0	0	0	0	0	0	0	0
Extraprovincial	996	928	944	921	920	927	911	901	883	884
Other	16	17	17	18	18	18	19	19	19	20
	3 298	3 342	3 475	3 575	3 702	3 849	3 980	4 065	4 145	4 248
EXPENSES										
Operating and Administrative	411	461	516	574	636	699	769	785	801	817
Finance Expense	1 264	1 243	1 214	1 201	1 175	1 146	1 104	1 033	994	945
Depreciation and Amortization	767	780	791	804	811	820	831	842	857	873
Water Rentals and Assessments	133	132	133	133	134	134	135	135	136	137
Fuel and Power Purchased	278	275	283	283	291	302	307	317	320	333
Capital and Other Taxes	162	163	164	165	166	167	169	170	173	174
Corporate Allocation	8	8	8	8	8	6	5	6	5	5
Other Expenses	3	2	2	2	2	2	3	3	3	3_
	3 025	3 065	3 111	3 171	3 224	3 277	3 322	3 291	3 288	3 287
Non-controlling Interest	(5)	(2)	(3)	(5)	(6)	(10)	(12)	(15)	(17)	(19)
Net Income	268	276	361	399	472	562	646	759	840	943
* Additional General Consumers Revenue	/		/	/	/	(2.220)	/	/		/
Percent Increase	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	2.00%	2.00%	2.00%
Cumulative Percent Increase	47.31%	53.13%	59.18%	65.47%	72.01%	78.80%	85.86%	89.58%	93.37%	97.24%
Financial Ratios										
Equity	16%	17%	19%	21%	23%	25%	28%	31%	34%	38%
Interest Coverage	1.21	1.22	1.29	1.33	1.39	1.48	1.57	1.72	1.82	1.96
Capital Coverage	1.77	1.79	1.91	1.95	2.00	2.18	2.19	2.35	2.45	2.57



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET PUB/MH-II-1a (i): 100% of the losses reduced, 100% covered by OM&A reductions (In Millions of Dollars)

For the year ended March 31 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 **ASSETS** Plant in Service 17 163 17 912 19 127 19 988 24 957 28 333 33 202 33 846 34 478 35 142 (6012)**Accumulated Depreciation** (5676)(6392)(6795)(7270)(7798)(8403)(9.055)(9721)(10401)Net Plant in Service 20 535 11 487 11 900 12 735 13 193 17 687 24 800 24 791 24 757 24 741 Construction in Progress 3 257 4 932 6 755 8 982 6 040 3 939 169 185 241 263 Current and Other Assets 1 798 1 570 1 822 2 2 9 4 2 596 2 7 2 6 2 167 2 285 2 432 2 2 6 8 Goodwill and Intangible Assets 198 186 175 166 166 177 168 152 137 121 Regulated Assets 254 278 313 352 396 420 434 431 416 398 28 298 16 993 18 866 21 800 24 961 26 584 27 666 27 727 27 835 27 955 LIABILITIES AND EQUITY Long-Term Debt 11 705 13 808 16 481 18 489 20 977 21 506 22 192 22 155 22 450 22 241 **Current and Other Liabilities** 2 0 1 6 2 1 3 1 2 2 3 4 3 138 2 181 2 682 2 655 2 134 1831 1 913 Contributions in Aid of Construction 412 446 480 514 549 583 618 654 690 727 **BPIII Reserve Account** 49 81 162 108 54 115 151 Retained Earnings 2717 2 7 9 8 2 900 3 0 3 2 3 043 3 066 3 066 3 083 3 169 3 3 7 9 Accumulated Other Comprehensive Income 94 (399)(409)(363)(328)(278)(287)(298)(305)(305)16 993 18 866 21 800 24 961 26 584 27 666 28 298 27 727 27 835 27 955



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET PUB/MH-II-1a (i): 100% of the losses reduced, 100% covered by OM&A reductions (In Millions of Dollars)

For the year ended March 31 2025 2026 2027 2029 2028 2030 2031 2032 2033 2034 **ASSETS** Plant in Service 35 822 36 544 37 410 38 124 38 859 39 555 40 294 41 050 41 823 42 952 **Accumulated Depreciation** (11096)(11807)(12532)(13274)(14030)(14800)(15585)(16384)(17200)(18031)Net Plant in Service 24 725 24 754 24 737 24 878 24 849 24 828 24 710 24 666 24 623 24 921 Construction in Progress 322 344 225 254 277 323 365 402 465 255 2 373 Current and Other Assets 2 5 1 9 2868 3 2 9 9 3 7 3 4 4 248 4 213 4 985 5 774 6 6 3 1 Goodwill and Intangible Assets 107 93 80 68 57 45 34 23 (0) 11 Regulated Assets 374 353 333 313 300 295 293 296 304 311 29 666 29 615 30 372 27 901 28 045 28 383 28 783 29 197 31 178 32 118 LIABILITIES AND EQUITY Long-Term Debt 21 795 21 998 22 201 22 143 22 076 21 349 21 339 21 343 21 337 20 981 Current and Other Liabilities 1 999 1 626 1 364 1 386 1 359 1 955 1 230 1 186 1 119 1 433 952 Contributions in Aid of Construction 764 802 839 876 914 990 1 029 1 069 1 109 **BPIII Reserve Account** 5 153 Retained Earnings 3 647 3 922 4 283 4 681 5714 6 359 7 118 7 957 8 899 Accumulated Other Comprehensive Income (304)(304)(304)(304)(304)(304)(304)(304)(304)(304)27 901 28 045 28 383 28 783 29 197 29 666 29 615 30 372 31 178 32 118



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT

PUB/MH-II-1a (i): 100% of the losses reduced, 100% covered by OM&A reductions (In Millions of Dollars)

- -	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING ACTIVITIES										
Cash Receipts from Customers	1 859	1 958	2 039	2 134	2 231	2 349	2 729	2 941	3 051	3 180
Cash Paid to Suppliers and Employees	(803)	(852)	(902)	(909)	(908)	(893)	(916)	(912)	(901)	(887)
Interest Paid	(511)	(514)	(543)	(588)	(774)	(912)	(1 199)	(1 313)	(1 279)	(1 279)
Interest Received	13	15	21	30	35	34	31	28	15	16
- -	558	606	616	668	584	579	645	744	886	1 030
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1 953	2 390	2 990	3 200	2 790	1 400	1 390	400	560	180
Sinking Fund Withdrawals	110	21	-	7	448	203	291	715	165	19
Retirement of Long-Term Debt	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
Other	(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
-	1 218	2 077	2 636	2 857	2 013	1 269	730	372	243	(123)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1 900)	(2 518)	(3 134)	(3 244)	(2253)	(1 550)	(1 010)	(756)	(698)	(697)
Sinking Fund Payment	(125)	(202)	(168)	(243)	(240)	(243)	(261)	(358)	(244)	(249)
Other	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
-	(2 046)	(2 742)	(3 323)	(3 508)	(2 514)	(1 828)	(1 301)	(1 144)	(973)	(976)
Net Increase (Decrease) in Cash	(270)	(58)	(71)	17	82	20	74	(28)	156	(69)
Cash at Beginning of Year	133	(137)	(195)	(266)	(250)	(167)	(148)	(73)	(101)	55
Cash at End of Year	(137)	(195)	(266)	(250)	(167)	(148)	(73)	(101)	55	(14)



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT

PUB/MH-II-1a (i): 100% of the losses reduced, 100% covered by OM&A reductions (In Millions of Dollars)

•	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPERATING ACTIVITIES										
Cash Receipts from Customers	3 295	3 340	3 472	3 572	3 699	3 846	3 977	4 062	4 142	4 245
Cash Paid to Suppliers and Employees	(946)	(994)	(1 057)	(1 116)	(1 187)	(1 262)	(1 338)	(1 365)	(1 387)	(1 417)
Interest Paid	(1 ²⁶⁷)	(1 249)	(1 229)	(1 234)	(1 223)	(1 201)	(1 175)	(1 080)	(1 054)	(1 018)
Interest Received	19	21	34	47	59	67	78	56	69	82
	1 101	1 118	1 220	1 268	1 348	1 450	1 542	1 673	1 770	1 892
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	(10)	180	190	(10)	(20)	(30)	(20)	(20)	(40)	(30)
Sinking Fund Withdrawals	287	89	-	-	60	100	700 [°]	13	30	-
Retirement of Long-Term Debt	(402)	(450)	-	-	(60)	(70)	(700)	(13)	-	20
Other	(31)	(30)	(29)	(27)	(25)	(22)	(21)	(38)	(37)	(36)
	(156)	(211)	161	(37)	(45)	(22)	(41)	(58)	(47)	(46)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(744)	(751)	(752)	(745)	(762)	(748)	(787)	(800)	(846)	(928)
Sinking Fund Payment	(257)	(252)	(257)	(268)	(278)	(286)	(292)	(268)	(278)	(288)
Other	(30)	(31)	(25)	(26)	(26)	(26)	(26)	(26)	(27)	(27)
	(1 031)	(1 034)	(1 035)	(1 039)	(1 066)	(1 060)	(1 105)	(1 095)	(1 151)	(1 243)
Net Increase (Decrease) in Cash	(86)	(127)	346	193	237	369	395	520	572	604
Cash at Beginning of Year	(14)	(100)	(227)	119	312	549	918	1 313	1 833	2 405
Cash at End of Year	(100)	(227)	119	312	549	918	1 313	1 833	2 405	3 009



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

PUB/MH-II-1a (ii): 100% of the losses reduced, 100% covered by increasing rates (In Millions of Dollars)

For the year ended March 31										
•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1 437	1 454	1 460	1 483	1 490	1 501	1 506	1 513	1 525	1 538
additional*	0	77	159	248	342	442	547	659	781	910
BPIII Reserve Account	(30)	(33)	(35)	(37)	(12)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 947	2 048	2 165	2 314	2 473	2 885	3 132	3 280	3 451
EXPENSES										
Operating and Administrative	486	542	552	557	571	585	601	607	619	631
Finance Expense	495	510	545	577	743	871	1 168	1 289	1 284	1 283
Depreciation and Amortization	405	401	422	445	521	523	612	665	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	145	146	153	154	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3
·	1 754	1 824	1 954	2 040	2 308	2 454	2 895	3 115	3 193	3 237
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	135	102	133	11	23	0	17	86	210
* Additional General Consumers Revenue										
Percent Increase	0.00%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%
Cumulative Percent Increase	0.00%	5.30%	10.88%	16.76%	22.95%	29.47%	36.33%	43.55%	51.16%	59.18%
Financial Ratios										
Equity	22%	18%	17%	16%	15%	15%	14%	14%	14%	15%
Interest Coverage	1.16	1.19	1.12	1.13	1.01	1.02	1.00	1.01	1.07	1.16
Capital Coverage	0.98	1.05	1.01	1.22	1.07	1.06	1.12	1.34	1.58	1.80



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

PUB/MH-II-1a (ii): 100% of the losses reduced, 100% covered by increasing rates (In Millions of Dollars)

For the year ended March 31										
•	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
General Consumers										
at approved rates	1 551	1 565	1 580	1 593	1 607	1 624	1 641	1 659	1 677	1 696
additional*	967	1 027	1 089	1 152	1 217	1 287	1 360	1 435	1 513	1 595
BPIII Reserve Account	0	0	0	0	0	0	0	0	0	0
Extraprovincial	996	928	944	921	920	927	911	901	883	884
Other	16	17	17	18	18	18	19	19	19	20
	3 531	3 538	3 629	3 684	3 762	3 856	3 930	4 014	4 093	4 194
EXPENSES										
Operating and Administrative	644	657	669	683	697	706	719	733	748	763
Finance Expense	1 264	1 243	1 214	1 201	1 175	1 146	1 104	1 033	994	945
Depreciation and Amortization	767	780	791	804	811	820	831	842	857	873
Water Rentals and Assessments	133	132	133	133	134	134	135	135	136	137
Fuel and Power Purchased	278	275	283	283	291	302	307	317	320	333
Capital and Other Taxes	162	163	164	165	166	167	169	170	173	174
Corporate Allocation	8	8	8	8	8	6	5	6	5	5
Other Expenses	3	2	2	2	2	2	3	3	3	3
·	3 258	3 260	3 265	3 280	3 284	3 285	3 272	3 240	3 236	3 232
Non-controlling Interest	(5)	(2)	(3)	(5)	(6)	(10)	(12)	(15)	(17)	(19)
Net Income	268	276	361	399	472	562	646	759	840	943
* Additional General Consumers Revenue										
Percent Increase	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Cumulative Percent Increase	62.36%	65.61%	68.92%	72.30%	75.74%	79.26%	82.84%	86.50%	90.23%	94.04%
Financial Ratios										
Equity	16%	17%	19%	21%	23%	25%	28%	31%	34%	38%
Interest Coverage	1.21	1.22	1.29	1.33	1.39	1.48	1.57	1.72	1.82	1.96

1.77

1.79

1.91

1.96

2.00

2.18

2.19

2.35

2.45

Capital Coverage

2.57



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET PUB/MH-II-1a (ii): 100% of the losses reduced, 100% covered by increasing rates (In Millions of Dollars)

roi die year ended march 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service	17 163	17 912	19 127	19 988	24 957	28 333	33 202	33 846	34 478	35 142
Accumulated Depreciation	(5 676)	(6 012)	(6 392)	(6 795)	(7 270)	(7 798)	(8 403)	(9 055)	(9 721)	(10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress	3 257	4 932	6 755	8 982	6 040	3 939	169	185	241	263
Current and Other Assets	1 798	1 570	1 822	2 268	2 294	2 596	2 726	2 167	2 286	2 432
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	278	313	352	396	420	434	431	416	398
	16 993	18 866	21 800	24 961	26 584	27 666	28 298	27 727	27 836	27 955
LIABILITIES AND EQUITY										
Long-Term Debt	11 705	13 808	16 481	18 489	20 977	21 506	22 192	22 155	22 450	22 241
Current and Other Liabilities	2 016	2 131	2 233	3 136	2 178	2 679	2 653	2 133	1 831	1 912
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	82	116	153	165	110	55	-	-	-
Retained Earnings	2 717	2 798	2 900	3 032	3 044	3 066	3 066	3 083	3 170	3 380
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)
	16 993	18 866	21 800	24 961	26 584	27 666	28 298	27 727	27 836	27 955



For the year ended March 31

Contributions in Aid of Construction

Accumulated Other Comprehensive Income

BPIII Reserve Account

Retained Earnings

Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-II-1a-c

ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET PUB/MH-II-1a (ii): 100% of the losses reduced, 100% covered by increasing rates

(In Millions of Dollars)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ASSETS										
Plant in Service	35 822	36 544	37 410	38 124	38 859	39 555	40 294	41 050	41 823	42 952
Accumulated Depreciation	(11 096)	(11 807)	(12 532)	(13 274)	(14 030)	(14 800)	(15 585)	(16 384)	(17 200)	(18 031)
Net Plant in Service	24 725	24 737	24 878	24 849	24 828	24 754	24 710	24 666	24 623	24 921
Construction in Progress	322	344	225	254	277	323	365	402	465	255
Current and Other Assets	2 373	2 519	2 868	3 300	3 735	4 249	4 214	4 986	5 775	6 632
Goodwill and Intangible Assets	107	93	80	68	57	45	34	23	11	(0)
Regulated Assets	374	353	333	313	300	295	293	296	304	311
	27 901	28 045	28 384	28 784	29 198	29 667	29 616	30 373	31 179	32 119
LIABILITIES AND EQUITY										
Long-Term Debt	21 795	21 998	22 201	22 143	22 076	21 349	21 339	21 343	21 337	20 981
Current and Other Liabilities	1 998	1 626	1 364	1 386	1 359	1 955	1 230	1 186	1 119	1 433

839

4 284

28 384

(304)

876

4 682

28 784

(304)

914

5 153

29 198

(304)

952

_

5 715

29 667

(304)

990

6 360

29 616

(304)

1 029

7 119

30 373

(304)

1 069

7 958

31 179

(304)

764

3 648

27 901

(304)

802

3 923

28 045

(304)

1 109

8 900

32 119

(304)



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT PUB/MH-II-1a (ii): 100% of the losses reduced, 100% covered by increasing rates (In Millions of Dollars)

•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING ACTIVITIES										
Cash Receipts from Customers	1 859	1 977	2 080	2 200	2 323	2 470	2 882	3 129	3 278	3 448
Cash Paid to Suppliers and Employees	(803)	(871)	(942)	(973)	(1 000)	(1 015)	(1 070)	(1 101)	(1 127)	(1 155)
Interest Paid	(511)	(514)	(543)	(588)	(774)	(912)	(1 199)	(1 313)	(1 279)	(1 279)
Interest Received	13	15	21	30	35	34	31	28	15	16
	558	607	616	670	585	578	644	743	886	1 030
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1 953	2 390	2 990	3 200	2 790	1 400	1 390	400	560	180
Sinking Fund Withdrawals	110	21	-	7	448	203	291	715	165	19
Retirement of Long-Term Debt	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
Other	(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
	1 218	2 077	2 636	2 857	2 013	1 269	730	372	243	(123)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1 900)	(2 518)	(3 134)	(3 244)	(2253)	(1 550)	(1 010)	(756)	(698)	(697)
Sinking Fund Payment	(125)	(202)	(168)	(243)	(240)	(243)	(261)	(358)	(244)	(249)
Other	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
	(2 046)	(2 742)	(3 323)	(3 508)	(2 514)	(1 828)	(1 301)	(1 144)	(973)	(976)
Net Increase (Decrease) in Cash	(270)	(58)	(70)	18	83	19	73	(29)	157	(69)
Cash at Beginning of Year	`133 [´]	(137)	(195)	(265)	(247)	(164)	(145)	(72)	(101)	`56 [°]
Cash at End of Year	(137)	(195)	(265)	(247)	(164)	(145)	(72)	(101)	56	(13)



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT PUB/MH-II-1a (ii): 100% of the losses reduced, 100% covered by increasing rates (In Millions of Dollars)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPERATING ACTIVITIES										
Cash Receipts from Customers	3 528	3 535	3 626	3 681	3 759	3 853	3 927	4 011	4 089	4 190
Cash Paid to Suppliers and Employees	(1 179)	(1 189)	(1 211)	(1 225)	(1 247)	(1 269)	(1 288)	(1 314)	(1 334)	(1 363)
Interest Paid	(1 267)	(1 249)	(1 229)	(1 234)	(1 222)	(1 201)	(1 175)	(1 079)	(1 054)	(1 018)
Interest Received	19	21	34	47	59	67	78	56	69	82
	1 101	1 118	1 220	1 268	1 348	1 450	1 542	1 673	1 770	1 892
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	(10)	180	190	(10)	(20)	(30)	(20)	(20)	(40)	(30)
Sinking Fund Withdrawals	287	89	-	-	60	100	700	13	30	- 1
Retirement of Long-Term Debt	(402)	(450)	-	-	(60)	(70)	(700)	(13)	-	20
Other	(31)	(30)	(29)	(27)	(25)	(22)	(21)	(38)	(37)	(36)
	(156)	(211)	161	(37)	(45)	(22)	(41)	(58)	(47)	(46)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(744)	(751)	(752)	(745)	(762)	(748)	(787)	(800)	(846)	(928)
Sinking Fund Payment	(257)	(252)	(257)	(268)	(278)	(286)	(292)	(268)	(278)	(288)
Other	(30)	(31)	(25)	(26)	(26)	(26)	(26)	(26)	(27)	(27)
	(1 031)	(1 034)	(1 035)	(1 039)	(1 066)	(1 060)	(1 105)	(1 095)	(1 151)	(1 243)
Net Increase (Decrease) in Cash	(86)	(127)	346	193	237	369	395	520	572	604
Cash at Beginning of Year	(13)	(99)	(226)	120	313	550	919	1 314	1 834	2 406
Cash at End of Year	(99)	(226)	120	313	550	919	1 314	1 834	2 406	3 010



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

PUB/MH-II-1a (iii): 50% of losses reduced, 100% covered by increasing rates (In Millions of Dollars)

For the year anded March 21										
For the year ended March 31	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1 437	1 454	1 460	1 483	1 490	1 501	1 506	1 513	1 525	1 538
additional*	0	65	132	206	283	364	448	537	633	735
BPIII Reserve Account	(30)	(33)	(34)	(36)	(11)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 934	2 022	2 124	2 255	2 394	2 786	3 010	3 133	3 276
EXPENSES										
Operating and Administrative	486	542	552	557	571	585	601	607	619	631
Finance Expense	495	510	546	580	748	880	1 184	1 312	1 315	1 325
Depreciation and Amortization	405	401	422	445	521	524	612	666	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	144	145	152	152	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3
	1 754	1 824	1 955	2 042	2 313	2 464	2 911	3 137	3 222	3 279
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	123	75	89	<u>(53)</u>	(66)	(115)	(127)	(90)	(7)
* Additional General Consumers Revenue										
Percent Increase	0.00%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%	4.44%
Cumulative Percent Increase	0.00%	4.44%	9.07%	13.91%	18.96%	24.24%	29.75%	35.50%	41.51%	47.79%
Financial Ratios										
Equity	22%	18%	16%	15%	14%	14%	13%	12%	11%	12%
Interest Coverage	1.16	1.17	1.09	1.09	0.95	0.95	0.91	0.90	0.93	0.99
Capital Coverage	0.98	1.03	0.97	1.14	0.94	0.89	0.93	1.08	1.26	1.42



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

PUB/MH-II-1a (iii): 50% of losses reduced, 100% covered by increasing rates (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
General Consumers										
at approved rates	1 551	1 565	1 580	1 593	1 607	1 624	1 641	1 659	1 677	1 696
additional*	787	842	898	956	1 015	1 079	1 145	1 214	1 285	1 359
BPIII Reserve Account	0	0	0	0	0	0	0	0	0	0
Extraprovincial	996	928	944	921	920	927	911	901	883	884
Other	16	17	17	18	18	18	19	19	19	20
	3 351	3 352	3 438	3 488	3 560	3 648	3 716	3 792	3 865	3 958
EXPENSES										
Operating and Administrative	644	657	669	683	697	706	719	733	748	763
Finance Expense	1 320	1 313	1 299	1 300	1 289	1 276	1 249	1 192	1 167	1 134
Depreciation and Amortization	767	780	791	804	811	820	831	842	857	873
Water Rentals and Assessments	133	132	133	133	134	134	135	135	136	137
Fuel and Power Purchased	278	275	283	283	291	302	307	317	320	333
Capital and Other Taxes	162	163	164	165	166	167	168	170	172	174
Corporate Allocation	8	8	8	8	8	6	5	6	5	5
Other Expenses	3	2	2	2	2	2	3	3	3	3
	3 315	3 330	3 350	3 379	3 398	3 414	3 417	3 398	3 408	3 421
Non-controlling Interest	(5)	(2)	(3)	(5)	(6)	(10)	(12)	(15)	(17)	(19)
Net Income	31	21	85	104	156	224	287	379	439	519
* Additional General Consumers Revenue										
Percent Increase	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Cumulative Percent Increase	50.75%	53.76%	56.84%	59.97%	63.17%	66.44%	69.76%	73.16%	76.62%	8 <mark>0.16%</mark>
Financial Ratios										
Equity	12%	12%	13%	13%	14%	15%	16%	18%	20%	22%
Interest Coverage	1.02	1.02	1.06	1.08	1.12	1.17	1.22	1.31	1.37	1.44
Capital Coverage	1.40	1.38	1.48	1.51	1.54	1.68	1.68	1.82	1.89	2.00



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET PUB/MH-II-1a (iii): 50% of losses reduced, 100% covered by increasing rates (In Millions of Dollars)

-	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service	17 163	17 912	19 127	19 988	24 957	28 333	33 202	33 846	34 478	35 142
Accumulated Depreciation	(5 676)	(6 012)	(6 392)	(6 795)	(7 270)	(7 798)	(8 403)	(9 055)	(9 721)	(10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress	3 257	4 932	6 755	8 982	6 040	3 939	169	185	241	263
Current and Other Assets	1 798	1 570	1 822	2 268	2 295	2 597	2 726	2 167	2 235	2 438
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	278	313	352	396	420	434	431	416	398
	16 993	18 866	21 801	24 961	26 585	27 668	28 298	27 727	27 785	27 962
	10 993	10 000	21001	24 30 1	20 303	27 000	20 290	21 121	21 103	21 302
LIABILITIES AND EQUITY										
Long-Term Debt	11 705	13 808	16 681	18 689	21 177	21 706	22 592	22 555	23 050	23 041
Current and Other Liabilities	2 016	2 144	2 073	3 020	2 128	2 718	2 605	2 228	1 852	2 007
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	81	115	152	163	109	54	-	-	-
Retained Earnings	2 717	2 785	2 860	2 949	2 896	2 830	2 715	2 588	2 498	2 491
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)
	16 993	18 866	21 801	24 961	26 585	27 668	28 298	27 727	27 785	27 962
	10 993	10 000	21001	2 4 30 I	20 303	21 000	20 290	21 121	21 100	21 902



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET PUB/MH-II-1a (iii): 50% of losses reduced, 100% covered by increasing rates (In Millions of Dollars)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ASSETS										
Plant in Service	35 822	36 544	37 410	38 124	38 859	39 555	40 294	41 050	41 823	42 952
Accumulated Depreciation	(11 096)	(11 807)	(12 532)	(13 274)	(14 030)	(14 800)	(15 585)	(16 384)	(17 200)	(18 031)
Net Plant in Service	24 725	24 737	24 878	24 849	24 828	24 754	24 710	24 666	24 623	24 921
Construction in Progress	322	344	225	254	277	323	365	402	465	255
Current and Other Assets	2 382	2 530	2 774	3 030	3 270	3 650	3 256	3 648	4 036	4 470
Goodwill and Intangible Assets	107	93	80	68	57	45	34	23	11	(0)
Regulated Assets	374	353	333	313	300	295	293	296	304	311
LIABILITIES AND EQUITY	27 909	28 057	28 289	28 514	28 733	29 068	28 658	29 035	29 440	29 956
LIADILITIES AND EQUIT										
Long-Term Debt	22 995	23 398	23 601	23 743	23 876	23 349	23 339	23 343	23 337	22 981
Current and Other Liabilities	1 932	1 618	1 527	1 468	1 362	1 962	1 237	1 193	1 126	1 440
Contributions in Aid of Construction	764	802	839	876	914	952	990	1 029	1 069	1 109
BPIII Reserve Account	=	-	-	-	-	-	-	-	-	-
Retained Earnings	2 523	2 543	2 627	2 730	2 885	3 109	3 395	3 774	4 212	4 730
Accumulated Other Comprehensive Income	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)
	27 909	28 057	28 289	28 514	28 733	29 068	28 658	29 035	29 440	29 956



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT

PUB/MH-II-1a (iii): 50% of losses reduced, 100% covered by increasing rates (In Millions of Dollars)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING ACTIVITIES										
Cash Receipts from Customers	1 859	1 965	2 054	2 158	2 264	2 392	2 783	3 007	3 130	3 273
Cash Paid to Suppliers and Employees	(803)	(871)	(942)	(973)	(1 000)	(1 015)	(1 069)	(1 100)	(1 125)	(1 155)
Interest Paid	(511)	(514)	(543)	(593)	(784)	(923)	(1 211)	(1 336)	(1 311)	(1 321)
Interest Received	` 13 [´]	` 15 [°]	` 21 [′]	30	35	34	` 31 [°]	28	` 15 [°]	` 16 [′]
	558	594	590	622	515	488	534	600	710	813
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1 953	2 390	3 190	3 200	2 790	1 400	1 590	400	760	380
Sinking Fund Withdrawals	110	21	-	7	448	204	293	715	165	24
Retirement of Long-Term Debt	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
Other	(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
	1 218	2 077	2 836	2 857	2 013	1 269	932	372	443	82
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1 900)	(2 518)	(3 134)	(3 244)	(2 253)	(1 550)	(1 010)	(756)	(698)	(697)
Sinking Fund Payment	(125)	(202)	(168)	(243)	(241)	(244)	(261)	(358)	(249)	(255)
Other	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
	(2 046)	(2 742)	(3 323)	(3 508)	(2 515)	(1 829)	(1 301)	(1 144)	(978)	(982)
Net Increase (Decrease) in Cash	(270)	(71)	103	(29)	12	(72)	165	(172)	175	(88)
Cash at Beginning of Year	133	(137)	(208)	(105)	(134)	(122)	(193)	(28)	(201)	(26)
Cash at End of Year	(137)	(208)	(105)	(134)	(122)	(193)	(28)	(201)	(26)	(114)



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT PUB/MH-II-1a (iii): 50% of losses reduced, 100% covered by increasing rates (In Millions of Dollars)

Cash Paid to Suppliers and Employees (1 179) (1 Interest Paid (1 319) (1 Interest Received 19 869	349 189) 322) 21 859	3 435 (1 211) (1 315) 35 944	3 485 (1 225) (1 331) 48 977	3 557 (1 247) (1 335) 61 1 036	3 645 (1 269) (1 330) 70 1 116	3 713 (1 288) (1 324) 82 1 182	3 789 (1 313) (1 243) 61 1 294	3 861 (1 334) (1 234) 75 1 369	3 955 (1 362) (1 214) 90 1 468
Cash Paid to Suppliers and Employees (1 179) (1 Interest Paid (1 319) (1 Interest Received 19 869	189) 322) 21 859	(1 211) (1 315) 35	(1 225) (1 331) 48	(1 247) (1 335) 61	(1 269) (1 330) 70	(1 288) (1 324) 82	(1 313) (1 243) 61	(1 334) (1 234) 75	(1 362) (1 214) 90
Interest Paid (1 319) (1 Interest Received) Interest Received 19 869 869	322) 21 859	(1 315) 35	(1 331) 48	(1 335) 61	(1 330) 70	(1 324) 82	(1 243) 61	(1 234) 75	(1 214) 90
Interest Received 19 869	21 859	` 35 [°]	` 48 [′]	` 61 [′]	` 70 [′]	` 82 [´]	` 61 [′]	` 75 [°]	90
869	859								
		944	977	1 036	1 116	1 182	1 294	1 369	1 468
	380								
FINANCING ACTIVITIES	380								
Proceeds from Long-Term Debt 390		190	190	180	170	(20)	(20)	(40)	(30)
Sinking Fund Withdrawals 293	98	-	-	60	100	700	13	30	-
Retirement of Long-Term Debt (402)	(450)	-	-	(60)	(70)	(700)	(13)	-	20
Other (31)	(30)	(29)	(27)	(25)	(22)	(21)	(38)	(37)	(36)
250	(2)	161	163	155	178	(41)	(58)	(47)	(46)
INVESTING ACTIVITIES									
Property, Plant and Equipment, net of contributions (744)	(751)	(752)	(745)	(762)	(748)	(787)	(800)	(846)	(928)
Sinking Fund Payment (266)	(264)	(272)	(284)	(297)	(306)	(315)	(293)	(304)	(314)
Other(30)	(31)	(25)	(26)	(26)	(26)	(26)	(26)	(27)	(27)
(1 040) (1	045)	(1 050)	(1 055)	(1 085)	(1 080)	(1 128)	(1 119)	(1 176)	(1 269)
Net Increase (Decrease) in Cash 79 ((189)	56	84	106	214	13	116	146	154
Cash at Beginning of Year (114)	(34)	(223)	(167)	(83)	24	238	251	367	513
	(223)	(167)	(83)	24	238	251	367	513	667



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

For the year ended March 31										
•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1 437	1 454	1 460	1 483	1 490	1 501	1 506	1 513	1 525	1 538
additional*	0	67	139	216	296	382	471	566	667	775
BPIII Reserve Account	(30)	(33)	(34)	(36)	(11)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 937	2 028	2 134	2 269	2 413	2 809	3 038	3 167	3 316
EXPENSES										
Operating and Administrative	486	532	531	524	525	525	524	513	506	497
Finance Expense	495	510	545	577	742	870	1 168	1 289	1 284	1 283
Depreciation and Amortization	405	401	422	445	521	524	612	666	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	145	146	153	154	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3
	1 754	1 814	1 933	2 007	2 262	2 394	2 819	3 021	3 079	3 103
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	136	103	134	12	23	0	<mark>17</mark>	87	210
* Additional General Consumers Revenue										
Percent Increase	0.00%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%
Cumulative Percent Increase	0.00%	4.64%	9.50%	14.58%	19.89%	25.46%	31.28%	37.37%	43.74%	50.41%
Financial Ratios										
Equity	22%	18%	17%	16%	15%	15%	14%	14%	14%	15%
Interest Coverage	1.16	1.19	1.12	1.13	1.01	1.02	1.00	1.01	1.07	1.16
Capital Coverage	0.98	1.05	1.01	1.22	1.07	1.06	1.13	1.34	1.58	1.80
1 0										



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

For the	year	enaea	warcn	37

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
General Consumers										
at approved rates	1 551	1 565	1 580	1 593	1 607	1 624	1 641	1 659	1 677	1 696
additional*	829	884	942	1 001	1 062	1 127	1 194	1 265	1 338	1 413
BPIII Reserve Account	0	0	0	0	0	0	0	0	0	0
Extraprovincial	996	928	944	921	920	927	911	901	883	884
Other	16	17	17	18	18	18	19	19	19	20
	3 393	3 395	3 482	3 533	3 607	3 696	3 765	3 843	3 917	4 013
EXPENSES										
Operating and Administrative	644	657	669	683	697	706	719	733	748	763
Finance Expense	1 266	1 253	1 235	1 230	1 211	1 189	1 155	1 093	1 063	1 023
Depreciation and Amortization	767	780	791	804	811	820	831	842	857	873
Water Rentals and Assessments	133	132	133	133	134	134	135	135	136	137
Fuel and Power Purchased	278	275	283	283	291	302	307	317	320	333
Capital and Other Taxes	162	163	164	165	166	167	168	170	173	174
Corporate Allocation	8	8	8	8	8	6	5	6	5	5
Other Expenses	3	2	2	2	2	2	3	3	3	3
·	3 261	3 270	3 286	3 308	3 320	3 328	3 323	3 299	3 304	3 310
Non-controlling Interest	(5)	(2)	(3)	(5)	(6)	(10)	(12)	(15)	(17)	(19)
Net Income	127	123	193	219	281	359	430	529	596	683
* Additional General Consumers Revenue										
Percent Increase	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Cumulative Percent Increase	53.42%	56.49%	59.62%	62.81%	66.07%	69.39%	72.78%	76.23%	79.76%	83.35%
Financial Ratios										
Equity	16%	16%	17%	18%	19%	21%	23%	25%	28%	30%
Interest Coverage	1.10	1.10	1.15	1.18	1.23	1.30	1.36	1.47	1.55	1.64
Capital Coverage	1.55	1.54	1.65	1.68	1.71	1.87	1.88	2.03	2.11	2.22



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET

For the year ended March 31										
•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service Accumulated Depreciation	17 163 (5 676)	17 912 (6 012)	19 127 (6 392)	19 988 (6 795)	24 957 (7 270)	28 333 (7 798)	33 202 (8 403)	33 846 (9 055)	34 478 (9 721)	35 142 (10 401)
Accumulated Depreciation	(5676)	(6 0 12)	(6.392)	(6 795)	(7 270)	(7 790)	(6 403)	(9 000)	(9721)	(10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress	3 257	4 932	6 755	8 982	6 040	3 939	169	185	241	263
Current and Other Assets	1 798	1 570	1 822	2 268	2 294	2 596	2 726	2 167	2 289	2 432
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	278	313	352	396	420	434	431	416	398
	16 993	18 866	21 800	24 961	26 584	27 666	28 298	27 727	27 839	27 955
LIABILITIES AND EQUITY										
Long-Term Debt	11 705	13 808	16 481	18 489	20 977	21 506	22 192	22 155	22 450	22 241
Current and Other Liabilities	2 016	2 131	2 232	3 134	2 176	2 677	2 650	2 130	1 831	1 909
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	81	116	152	163	109	54	-	-	-
Retained Earnings	2 717	2 798	2 901	3 035	3 047	3 070	3 070	3 087	3 173	3 383
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)
	16 993	18 866	21 800	24 961	26 584	27 666	28 298	27 727	27 839	27 955



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ASSETS										
Plant in Service	35 822	36 544	37 410	38 124	38 859	39 555	40 294	41 050	41 823	42 952
Accumulated Depreciation	(11 096)	(11 807)	(12 532)	(13 274)	(14 030)	(14 800)	(15 585)	(16 384)	(17 200)	(18 031)
Net Plant in Service	24 725	24 737	24 878	24 849	24 828	24 754	24 710	24 666	24 623	24 921
Construction in Progress	322	344	225	254	277	323	365	402	465	255
Current and Other Assets	2 373	2 520	2 808	3 059	3 304	3 614	3 363	3 905	4 450	5 047
Goodwill and Intangible Assets	107	93	80	68	57	45	34	23	11	(0)
Regulated Assets	374	353	333	313	300	295	293	296	304	311
	27 901	28 047	28 323	28 544	28 766	29 032	28 765	29 292	29 853	30 534
LIABILITIES AND EQUITY										
Long-Term Debt	21 995	22 398	22 601	22 543	22 476	21 749	21 739	21 743	21 737	21 381
Current and Other Liabilities	1 936	1 518	1 363	1 385	1 357	1 953	1 228	1 184	1 117	1 431
Contributions in Aid of Construction	764	802	839	876	914	952	990	1 029	1 069	1 109
BPIII Reserve Account	-	-	-	-	-	-	-	-	-	-
Retained Earnings	3 510	3 632	3 825	4 043	4 323	4 681	5 110	5 639	6 234	6 917
Accumulated Other Comprehensive Income	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)
	27 901	28 047	28 323	28 544	28 766	29 032	28 765	29 292	29 853	30 534



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT

PUB/MH-II-1b: 100% of losses reduced, 50% covered by OM&A reductions, 50% covered by increasing rates (In Millions of Dollars)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING ACTIVITIES										
Cash Receipts from Customers	1 859	1 968	2 060	2 167	2 277	2 410	2 806	3 035	3 164	3 313
Cash Paid to Suppliers and Employees	(803)	(861)	(922)	(940)	(954)	(955)	(994)	(1 007)	(1 014)	(1 021)
Interest Paid	(511)	(514)	(543)	(588)	(774)	(911)	(1 199)	(1 312)	(1 279)	(1 279)
Interest Received	` 13 [´]	` 15 [°]	` 21 [′]	30	` 35 [°]	34	` 31 [°]	28	` 15 [°]	` 16 [°]
	558	607	617	670	585	579	644	744	887	1 029
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1 953	2 390	2 990	3 200	2 790	1 400	1 390	400	560	180
Sinking Fund Withdrawals	110	21	-	7	448	203	291	715	165	19
Retirement of Long-Term Debt	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
Other	(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
	1 218	2 077	2 636	2 857	2 013	1 269	730	372	243	(123)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1 900)	(2 518)	(3 134)	(3 244)	(2253)	(1 550)	(1 010)	(756)	(698)	(697)
Sinking Fund Payment	(125)	(202)	(168)	(243)	(240)	(243)	(261)	(358)	(244)	(249)
Other	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
	(2 046)	(2 742)	(3 323)	(3 508)	(2 514)	(1 828)	(1 301)	(1 144)	(973)	(976)
Net Increase (Decrease) in Cash	(270)	(58)	(70)	19	84	19	74	(29)	157	(70)
Cash at Beginning of Year	133	(137)	(195)	(265)	(246)	(162)	(143)	(69)	(97)	59
Cash at End of Year	(137)	(195)	(265)	(246)	(162)	(143)	(69)	(97)	59	(11)



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT

PUB/MH-II-1b: 100% of losses reduced, 50% covered by OM&A reductions, 50% covered by increasing rates (In Millions of Dollars)

OPERATING ACTIVITIES Cash Receipts from Customers 3 390 3 392 3 479 3 530 3 604 3 693 3 762 3 840 3 914	4 009 (1 362) (1 098)
*· -· · · · · · · · · · · · · · · · · ·	(1 362)
Cash Receipts from Customers 3 390 3 392 3 479 3 530 3 604 3 693 3 762 3 840 3 914	(1 362)
	,
Cash Paid to Suppliers and Employees (1 179) (1 189) (1 211) (1 225) (1 247) (1 269) (1 288) (1 314) (1 334)	(1.098)
Interest Paid (1 269) (1 260) (1 251) (1 263) (1 259) (1 245) (1 227) (1 140) (1 124)	
Interest Received 19 21 34 47 59 67 79 57 70	84
960 964 1 052 1 088 1 157 1 246 1 325 1 443 1 526	1 633
FINANCING ACTIVITIES	
Proceeds from Long-Term Debt 190 380 190 (10) (20) (30) (20) (20)	(30)
Sinking Fund Withdrawals 287 89 60 100 700 13 30	-
Retirement of Long-Term Debt (402) (450) (60) (70) (700) (13) -	20
Other (31) (30) (29) (27) (25) (22) (21) (38) (37)	(36)
44 (11) 161 (37) (45) (22) (41) (58) (47)	(46)
INVESTING ACTIVITIES	
Property, Plant and Equipment, net of contributions (744) (751) (752) (745) (762) (748) (787) (800) (846)	(928)
Sinking Fund Payment (257) (253) (260) (272) (282) (290) (297) (273) (284)	(293)
Other (30) (31) (25) (26) (26) (26) (26) (27)	(27)
(1 031) (1 035) (1 038) (1 043) (1 071) (1 064) (1 110) (1 100) (1 156)	(1 248)
Net Increase (Decrease) in Cash (27) (83) 175 8 41 161 174 285 323	339
Cash at Beginning of Year (11) (37) (120) 55 64 105 266 440 726	1 049
Cash at End of Year (37) (120) 55 64 105 266 440 726 1 049	1 388



For the year ended March 31

Manitoba Hydro 2014/15 & 2015/16 General Rate Application PUB/MH-II-1a-c

ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

PUB/MH-II-1c: 50% of losses reduced, 50% covered by OM&A reductions, 50% covered by increasing rates (In Millions of Dollars)

For the year ended warch 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers										
at approved rates	1 437	1 454	1 460	1 483	1 490	1 501	1 506	1 513	1 525	1 538
additional*	0	61	125	194	266	342	421	504	594	688
BPIII Reserve Account	(30)	(32)	(34)	(36)	(11)	0	0	0	0	0
Extraprovincial	409	434	450	457	479	514	817	943	959	987
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 931	2 015	2 112	2 239	2 373	2 759	2 977	3 094	3 229
EXPENSES										
Operating and Administrative	486	538	544	545	555	564	574	574	580	585
Finance Expense	495	510	546	580	748	880	1 184	1 312	1 315	1 325
Depreciation and Amortization	405	401	422	445	521	524	612	666	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	130	191	202	207	205	234	263	257	267
Capital and Other Taxes	99	107	121	134	143	144	145	152	152	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
Other Expenses	2	2	2	2	2	3	3	3	3	3
	1 754	1 820	1 948	2 030	2 297	2 443	2 884	3 104	3 183	3 233
Non-controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	123	75	89	(53)	(66)	<mark>(115)</mark>	(127)	(90)	(7)
* Additional General Consumers Revenue										
Percent Increase	0.00%	4.19%	4.19%	4.19%	4.19%	4.19%	4.19%	4.19%	4.19%	4.19%
Cumulative Percent Increase	0.00%	4.19%	8.56%	13.12%	17.86%	22.81%	27.96%	33.33%	38.92%	44.74%
	212270		/0	/ •						, 0

22%

1.16

0.98

18%

1.17

1.03

16%

1.09

0.97

15%

1.09

1.14

14%

0.95

0.94

14%

0.95

0.89

13%

0.91

0.93

12%

0.93

1.26

0.90

1.08

Financial Ratios Equity

Interest Coverage

Capital Coverage

12%

0.99

1.42



ELECTRIC OPERATIONS (MH14) PROJECTED OPERATING STATEMENT

For the year ended Ma	rch 31
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•	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
General Consumers										
at approved rates	1 551	1 565	1 580	1 593	1 607	1 624	1 641	1 659	1 677	1 696
additional*	783	883	989	1 099	1 216	1 342	1 474	1 553	1 635	1 720
BPIII Reserve Account	0	0	0	0	0	0	0	0	0	0
Extraprovincial	996	928	944	921	920	927	911	901	883	884
Other	16	17	17	18	18	18	19	19	19	20
	3 347	3 394	3 529	3 631	3 761	3 911	4 045	4 132	4 215	4 320
EXPENSES										
Operating and Administrative	644	657	669	683	697	706	719	733	748	763
Finance Expense	1 320	1 312	1 296	1 290	1 268	1 241	1 199	1 128	1 087	1 037
Depreciation and Amortization	767	780	791	804	811	820	831	842	857	873
Water Rentals and Assessments	133	132	133	133	134	134	135	135	136	137
Fuel and Power Purchased	278	275	283	283	291	302	307	317	320	333
Capital and Other Taxes	162	163	164	165	166	167	168	170	173	174
Corporate Allocation	8	8	8	8	8	6	5	6	5	5
Other Expenses	3	2	2	2	2	2	3	3	3	3
	3 315	3 329	3 347	3 368	3 377	3 380	3 368	3 334	3 329	3 324
Non-controlling Interest	(5)	(2)	(3)	(5)	(6)	(10)	(12)	(15)	(17)	(19)
Net Income	27	63	179	258	378	522	665	783	869	977
* Additional General Consumers Revenue										
Percent Increase	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	2.00%	2.00%	2.00%
Cumulative Percent Increase	50.46%	56.40%	62.58%	69.00%	75.68%	82.62%	89.83%	93.63%	97.50%	101.45%
Cumulative i crocht morease	30.4070	30.40 /0	02.50 /0	03.0070	7 3.00 70	02.0270	03.0370	33.03 70	37.3070	101.4370
Financial Ratios										
Equity	12%	12%	13%	14%	16%	18%	21%	24%	28%	31%
Interest Coverage	1.02	1.05	1.14	1.20	1.29	1.41	1.54	1.68	1.78	1.91
Capital Coverage	1.39	1.44	1.63	1.74	1.86	2.12	2.22	2.39	2.49	2.62



28 298

27 727

27 785

27 668

ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET

PUB/MH-II-1c: 50% of losses reduced, 50% covered by OM&A reductions, 50% covered by increasing rates (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service	17 163	17 912	19 127	19 988	24 957	28 333	33 202	33 846	34 478	35 142
Accumulated Depreciation	(5 676)	(6 012)	(6 392)	(6 795)	(7 270)	(7 798)	(8 403)	(9 055)	(9 721)	(10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress	3 257	4 932	6 755	8 982	6 040	3 939	169	185	241	263
Current and Other Assets	1 798	1 570	1 822	2 268	2 295	2 597	2 726	2 167	2 235	2 438
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	278	313	352	396	420	434	431	416	398
	16 993	18 866	21 801	24 961	26 585	27 668	28 298	27 727	27 785	27 962
LIABILITIES AND EQUITY										
Long-Term Debt	11 705	13 808	16 681	18 689	21 177	21 706	22 592	22 555	23 050	23 041
Current and Other Liabilities	2 016	2 144	2 073	3 020	2 128	2 718	2 605	2 228	1 852	2 007
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	81	115	151	162	108	54	-	-	-
Retained Earnings	2 717	2 786	2 861	2 950	2 897	2 831	2 716	2 589	2 498	2 491
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)

21 801

24 961

26 585

16 993

18 866

27 962



ELECTRIC OPERATIONS (MH14) PROJECTED BALANCE SHEET

PUB/MH-II-1c: 50% of losses reduced, 50% covered by OM&A reductions, 50% covered by increasing rates (In Millions of Dollars)

For the year ended March 31										
•	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ASSETS										
Plant in Service Accumulated Depreciation	35 822 (11 096)	36 544 (11 807)	37 410 (12 532)	38 124 (13 274)	38 859 (14 030)	39 555 (14 800)	40 294 (15 585)	41 050 (16 384)	41 823 (17 200)	42 952 (18 031)
Net Plant in Service	24 725	24 737	24 878	24 849	24 828	24 754	24 710	24 666	24 623	24 921
Construction in Progress Current and Other Assets Goodwill and Intangible Assets Regulated Assets	322 2 382 107 374	344 2 531 93 353	225 2 774 80 333	254 3 029 68 313	277 3 371 57 300	323 3 844 45 295	365 3 829 34 293	402 4 625 23 296	465 5 442 11 304	255 6 334 (0) 311
	27 909	28 057	28 289	28 513	28 834	29 262	29 231	30 011	30 846	31 820
LIABILITIES AND EQUITY										
Long-Term Debt Current and Other Liabilities Contributions in Aid of Construction BPIII Reserve Account Retained Earnings Accumulated Other Comprehensive Income	22 995 1 937 764 - 2 518 (304)	23 398 1 580 802 - 2 580 (304)	23 601 1 395 839 - 2 759 (304)	23 543 1 381 876 - 3 017 (304)	23 476 1 354 914 - 3 394 (304)	22 749 1 950 952 - 3 915 (304)	22 739 1 225 990 - 4 580 (304)	22 743 1 181 1 029 - 5 362 (304)	22 737 1 114 1 069 - 6 230 (304)	22 381 1 428 1 109 - 7 206 (304)
	27 909	28 057	28 289	28 513	28 834	29 262	29 231	30 011	30 846	31 820



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT

PUB/MH-II-1c: 50% of losses reduced, 50% covered by OM&A reductions, 50% covered by increasing rates (In Millions of Dollars)

For the year ended March 31

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING ACTIVITIES										
Cash Receipts from Customers	1 859	1 961	2 047	2 146	2 247	2 370	2 756	2 974	3 091	3 226
Cash Paid to Suppliers and Employees	(803)	(868)	(935)	(961)	(983)	(994)	(1 042)	(1 067)	(1 085)	(1 109)
Interest Paid	(511)	(514)	(543)	(593)	(784)	(923)	(1 211)	(1 336)	(1 311)	(1 321)
Interest Received	13	15	21	30	35	34	31	28	15	16
	558	594	590	622	515	488	534	600	710	813
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1 953	2 390	3 190	3 200	2 790	1 400	1 590	400	760	380
Sinking Fund Withdrawals	110	21	-	7	448	204	293	715	165	24
Retirement of Long-Term Debt	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
Other	(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
	1 218	2 077	2 836	2 857	2 013	1 269	932	372	443	82
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1 900)	(2 518)	(3 134)	(3 244)	(2253)	(1 550)	(1 010)	(756)	(698)	(697)
Sinking Fund Payment	(125)	(202)	(168)	(243)	(241)	(244)	(261)	(358)	(249)	(255)
Other	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
	(2 046)	(2 742)	(3 323)	(3 508)	(2 515)	(1 829)	(1 301)	(1 144)	(978)	(982)
Net Increase (Decrease) in Cash	(270)	(71)	103	(29)	12	(72)	165	(172)	175	(88)
Cash at Beginning of Year	133	(137)	(208)	(105)	(134)	(121)	(193)	(28)	(201)	(26)
Cash at End of Year	(137)	(208)	(105)	(134)	(121)	(193)	(28)	(201)	(26)	(114)



ELECTRIC OPERATIONS (MH14) PROJECTED CASH FLOW STATEMENT

PUB/MH-II-1c: 50% of losses reduced, 50% covered by OM&A reductions, 50% covered by increasing rates (In Millions of Dollars)

For the year ended March 31

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPERATING ACTIVITIES										
Cash Receipts from Customers	3 344	3 391	3 526	3 628	3 758	3 908	4 042	4 129	4 211	4 316
Cash Paid to Suppliers and Employees	(1 179)	(1 189)	(1 211)	(1 225)	(1 247)	(1 269)	(1 288)	(1 314)	(1 334)	(1 363)
Interest Paid	(1 319)	(1 322)	(1 312)	(1 324)	(1 317)	(1 299)	(1 274)	(1 178)	(1 153)	(1 116)
Interest Received	19	21	35	48	61	70	81	60	74	88
·	864	901	1 038	1 127	1 255	1 410	1 561	1 697	1 799	1 926
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	390	380	190	(10)	(20)	(30)	(20)	(20)	(40)	(30)
Sinking Fund Withdrawals	293	98	-	-	60	100	700	13	30	-
Retirement of Long-Term Debt	(402)	(450)	-	-	(60)	(70)	(700)	(13)	-	20
Other	(31)	(30)	(29)	(27)	(25)	(22)	(21)	(38)	(37)	(36)
-	250	(2)	161	(37)	(45)	(22)	(41)	(58)	(47)	(46)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(744)	(751)	(752)	(745)	(762)	(748)	(787)	(800)	(846)	(928)
Sinking Fund Payment	(266)	(264)	(271)	(283)	(294)	(302)	(309)	(286)	(297)	(307)
Other	(30)	(31)	(25)	(26)	(26)	(26)	(26)	(26)	(27)	(27)
_	(1 040)	(1 045)	(1 049)	(1 054)	(1 082)	(1 076)	(1 122)	(1 113)	(1 169)	(1 262)
Net Increase (Decrease) in Cash	75	(147)	150	37	128	312	398	526	583	619
Cash at Beginning of Year	(114)	(39)	(186)	(35)	1	129	441	839	1 365	1 948
Cash at End of Year	(39)	(186)	(35)	1	129	441	839	1 365	1 948	2 567



Section:	Tab 9	Page No.:	p. 7 of 23
Topic:	Energy Supply		
Subtopic:	Domestic Revenues		
Issue:	DSM Impacts		

PREAMBLE TO IR (IF ANY):

IFF MH 14 assumes up to 1730 GWh of DSM savings by 2019/20.

QUESTION:

- a) Provide a revised IFF MH 14 with DSM savings reduced by 50% in each year.
- b) What would be the change to annual rate increases (from 3.95%) if MH met the same financial targets/retained earnings with 50% DSM achieved.

RATIONALE FOR QUESTION:

This question explores the impact of not achieving DSM targets.

RESPONSE:

The first financial scenario below reflects DSM programs and savings reduced by 50% per year over the forecast period from 2015/16 to 2033/34. This scenario makes the following assumptions:

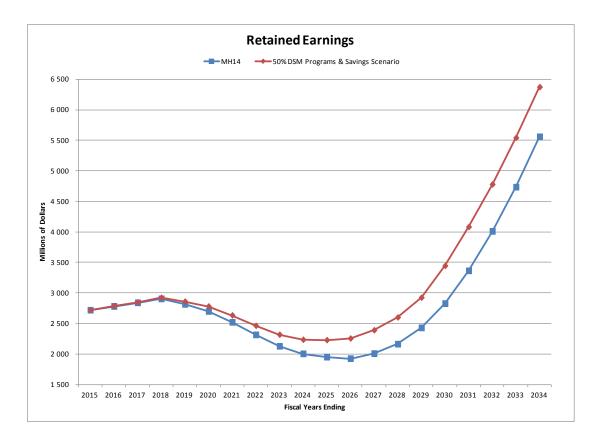
- DSM utility costs are \$0.4 billion lower over the forecast period to 2033/34 compared to MH14 due to the reduction in DSM programs;
- Due to the reduction in DSM savings, new energy resources are required by 2030/31. It is assumed that additional generation is required in 2030/31 and 2032/33 at a total projected cost of \$0.4 billion;
- Projected rate increases are the same as MH14;
- Projected Manitoba domestic revenue is \$1.7 billion higher (including additional revenue) to 2033/34 compared to MH14 due to the reduction in DSM savings; and

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• The reduction in DSM savings results in less energy available for export and reduces projected net export revenue (net of water rentals and fuel and power purchased) by \$1.5 billion over the period to 2033/34 compared to MH14.

The following figure shows the retained earnings under MH14 and the 50% DSM programs and savings scenario over the forecast period to 2033/34. The 50% DSM programs and savings scenario results in cumulative projected losses of \$694 million over the six year period 2018/19 to 2023/24 compared to \$978 million in cumulative losses over the eight year period 2018/19 to 2025/26 in MH14.

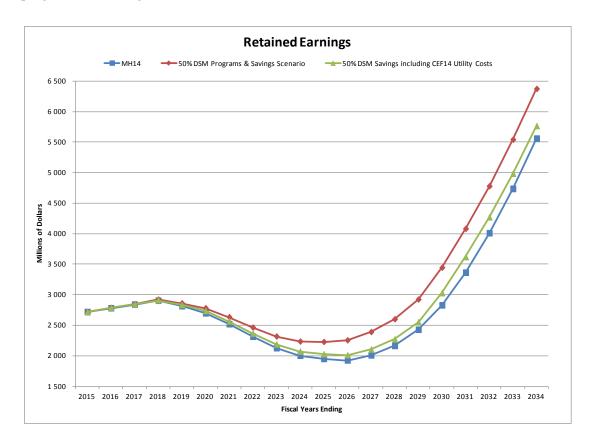


An alternative scenario has been prepared with the same assumptions as noted above except that the DSM utility costs are the same as CEF14. This scenario shows the financial impacts of Manitoba Hydro's investment in more aggressive DSM but do not result in the projected savings or customer uptake.

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The following figure shows the projected retained earnings of the alternate DSM savings scenario assuming the same utility costs as CEF14 compared to MH14 and the DSM 50% programs and savings scenario.



Projected retained earnings are approximately \$200 million higher compared to MH14 due to the shift in energy from export sales to domestic sales and partially offset by the incremental operating and carrying costs for the additional generation required to meet domestic load in 2030/31 and 2032/33. This scenario results in projected cumulative net losses of \$898 billion over the eight year period 2018/19 to 2025/26.

Mathematically, the even annual rate increase under the DSM savings scenarios may be reduced from MH14's projected 3.95% rate increases from 2015/16 to 2030/31 to 3.83% and 3.92%, respectively (assumes the 2.0% rate increases 2031/32 to 2033/34 remain the same under both scenarios). However, a reduction to even annual rate increases only serves to increase the cumulative losses projected under both these DSM savings scenarios increasing the risk of rate instability for customers. The proposed and projected 3.95% rate increases

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are the minimum required to maintain Manitoba Hydro's financial strength and affordable, predictable rates for customers.

The projected financial statements for the DSM 50% program and savings scenario and the alternate DSM 50% savings scenario including the CEF14 utility costs are attached.

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Electric Operations 50% DSM Programs & Savings Projected Operating Statement (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers Revenue at approved rates	1 437	1 467	1 480	1 510	1 527	1 547	1 558	1 571	1 586	1 601
Additional General Consumers Revenue	-	58	119	186	256	331	408	489	576	668
BPIII Reserve Account	(30)	(33)	(34)	(36)	(11)	-	-	-	-	-
Extraprovincial	409	428	430	438	459	483	762	880	890	910
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 935	2 009	2 112	2 245	2 375	2 742	2 955	3 068	3 195
EXPENSES										
Operating and Administrative	486	542	552	558	571	586	601	607	619	631
Finance Expense	495	510	546	578	746	878	1 181	1 312	1 317	1 331
Depreciation and Amortization	405	401	420	440	513	512	598	650	718	732
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	131	196	210	216	213	240	271	266	277
Capital and Other Taxes	99	107	120	134	143	144	144	151	151	160
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
	1 754	1 825	1 956	2 043	2 312	2 458	2 899	3 127	3 213	3 274
Non-Controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	122	60	76	(62)	(79)	(147)	(171)	(146)	(83)
* Additional General Consumers Revenue										
Percent Increase	0.00%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	0.00%	3.95%	8.06%	12.32%	16.76%	21.37%	26.17%	31.15%	36.33%	41.72%
Financial Ratios										
Debt Ratio	78	82	84	85	86	86	87	89	89	89
Interest Coverage Ratio	1.16	1.17	1.07	1.07	0.95	0.93	0.89	0.87	0.89	0.94
Capital Coverage Ratio	0.98	1.03	0.94	1.11	0.91	0.85	0.84	0.98	1.13	1.26

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Electric Operations 50% DSM Programs & Savings Projected Operating Statement (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
General Consumers Revenue at approved rates	1 617	1 633	1 649	1 665	1 681	1 698	1 716	1 734	1 753	1 772
Additional General Consumers Revenue	765	868	976	1 090	1 210	1 338	1 473	1 553	1 637	1 723
BPIII Reserve Account	-	-	-	-	-	-	-	-	-	-
Extraprovincial	913	840	849	824	817	863	848	816	813	810
Other	16 3 312	17 3 358	17 3 491	18 3 596	18 3 726	18 3 918	19 4 056	19 4 123	19 4 222	4 325
EXPENSES	3 312	3 338	3 491	3 390	3 720	3 918	4 030	4 123	4 222	4 323
Operating and Administrative	644	657	669	683	696	705	725	739	761	776
Finance Expense	1 331	1 324	1 311	1 309	1 290	1 262	1 217	1 161	1 122	1 092
Depreciation and Amortization	746	757	770	784	793	804	816	838	852	878
Water Rentals and Assessments	133	132	133	133	134	138	138	137	137	137
Fuel and Power Purchased	288	286	295	297	306	301	332	353	386	406
Capital and Other Taxes	161	162	163	164	166	168	170	172	175	176
Corporate Allocation	8	8	8	8	8	6	5	6	5	5
	3 313	3 330	3 352	3 382	3 396	3 388	3 406	3 410	3 442	3 475
Non-Controlling Interest	(5)	(2)	(3)	(5)	(6)	(10)	(12)	(15)	(17)	(19)
Net Income	(6)	27	136	209	324	520	637	698	763	831
* Additional General Consumers Revenue										
Percent Increase	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	2.00%	2.00%	2.00%
Cumulative Percent Increase	47.31%	53.13%	59.18%	65.47%	72.01%	78.80%	85.86%	89.58%	93.37%	97.24%
Financial Ratios										
Debt Ratio	89	89	88	87	86	84	81	79	76	72
Interest Coverage Ratio	1.00	1.02	1.10	1.16	1.25	1.40	1.51	1.58	1.65	1.74
Capital Coverage Ratio	1.31	1.36	1.53	1.64	1.75	2.09	2.16	2.26	2.33	2.43
1										

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Electric Operations 50% DSM Programs & Savings Projected Balance Sheet (In Millions of Dollars)

For the year ended March 31										
·	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service	17 163	17 912	19 127	19 988	24 957	28 333	33 202	33 846	34 478	35 142
Accumulated Depreciation	(5 676)	(6 012)	(6 392)	(6 795)	(7 270)	(7 798)	(8 403)	(9 055)	(9 721)	(10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress	3 257	4 932	6 755	8 982	6 040	3 939	169	185	241	263
Current and Other Assets	1 798	1 570	1 822	2 268	2 294	2 596	2 726	2 167	2 235	2 438
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	257	265	279	296	306	310	305	293	281
	16 993	18 845	21 753	24 888	26 485	27 553	28 174	27 601	27 662	27 845
LIABILITIES AND EQUITY										
Long Term Debt	11 705	13 808	16 481	18 689	20 977	21 706	22 392	22 555	23 050	23 041
Current and Other Liabilities	2 016	2 124	2 240	2 976	2 265	2 654	2 764	2 228	1 912	2 149
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	81	116	152	163	109	54	-	-	-
Retained Earnings	2 717	2 785	2 845	2 921	2 859	2 779	2 632	2 462	2 316	2 233
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)
	16 993	18 845	21 753	24 888	26 485	27 553	28 174	27 601	27 662	27 845

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Electric Operations 50% DSM Programs & Savings Projected Balance Sheet (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ASSETS										
Plant in Service	35 822	36 544	37 410	38 124	38 859	39 555	40 581	41 337	42 409	43 537
Accumulated Depreciation	(11 096)	(11 807)	(12 532)	(13 274)	(14 030)	(14 800)	(15 585)	(16 394)	(17 219)	(18 069)
Net Plant in Service	24 725	24 737	24 878	24 849	24 828	24 754	24 997	24 943	25 190	25 468
Construction in Progress	322	344	225	254	379	572	472	663	465	255
Current and Other Assets	2 383	2 532	2 778	3 120	3 301	3 623	3 436	4 003	4 689	5 457
Goodwill and Intangible Assets	107	93	80	68	57	45	34	23	11	(0)
Regulated Assets	266	254	243	231	223	220	218	221	226	231
	27 802	27 960	28 204	28 521	28 788	29 215	29 156	29 852	30 582	31 411
LIABILITIES AND EQUITY										
Long Term Debt	22 995	23 598	23 801	23 943	23 876	23 149	23 139	23 143	23 137	22 781
Current and Other Liabilities	2 121	1 611	1 479	1 408	1 380	1 976	1 251	1 207	1 140	1 454
Contributions in Aid of Construction	764	802	839	876	914	952	990	1 029	1 069	1 109
BPIII Reserve Account	-	-	-	-	-	-	-	-	-	-
Retained Earnings	2 227	2 253	2 389	2 598	2 922	3 442	4 079	4 777	5 540	6 371
Accumulated Other Comprehensive Income	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)
	27 802	27 960	28 204	28 521	28 788	29 215	29 156	29 852	30 582	31 411
		_, , , , ,					->			

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Electric Operations 50% DSM Programs & Savings Projected Cash Flow Statement (In Millions of Dollars)

For the year ended March 3	For the	vear	e nde d	March	31
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•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ODED A TING A CTIVITIES										
OPERATING ACTIVITIES	1.050	1.065	2.041	2.146	2.254	2 272	2.740	2.052	2.065	2 102
Cash Receipts from Customers	1 859	1 965	2 041	2 146	2 254	2 373	2 740	2 953	3 065	3 192
Cash Paid to Suppliers and Employees	(803)	(872)	(947)	(981)	$(1\ 009)$	$(1\ 023)$	$(1\ 075)$	(1 106)	$(1\ 132)$	(1 165)
Interest Paid	(511)	(515)	(543)	(589)	(779)	(918)	$(1\ 212)$	$(1\ 331)$	$(1\ 313)$	$(1\ 323)$
Interest Received	13	15	21	30	35	34	31	28	15	16
	558	593	572	607	501	466	484	544	636	721
FINANCING ACTIVITIES										
Proceeds from Long Term Debt	1 953	2 390	2 990	3 400	2 590	1 600	1 390	600	760	380
Sinking Fund Withdrawals	110	21	-	7	448	203	292	715	165	24
Retirement of Long Term Debt	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
Other Financing Activities	(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
	1 218	2 077	2 636	3 057	1 813	1 469	731	572	443	82
INVESTING ACTIVITIES										
Property Plant and Equipment net of contributions	(1 900)	(2498)	(3 105)	(3 214)	(2219)	(1 524)	(986)	(737)	(684)	(683)
Sinking Fund Payment	(125)	(202)	(167)	(243)	(240)	(244)	(261)	(358)	(249)	(255)
Other Investing Activities	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
	(2 046)	(2 721)	(3 294)	(3 478)	(2 480)	(1 803)	(1 277)	(1 125)	(963)	(968)
Net Increase (Decrease) in Cash	(270)	(51)	(85)	186	(167)	132	(62)	(9)	115	(166)
Cash at Beginning of Year	133	(137)	(187)	(273)	(87)	(254)	(121)	(184)	(193)	(78)
Cash at End of Year	(137)	(187)	(273)	(87)	(254)	(121)	(184)	(193)	(78)	(244)
Cash at the Offical	(137)	(107)	(213)	(67)	(234)	(121)	(104)	(173)	(70)	(244)

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Electric Operations 50% DSM Programs & Savings Projected Cash Flow Statement (In Millions of Dollars)

For the	ve ar	e nde d	March	31
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v	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPERATING ACTIVITIES										
OPERATING ACTIVITIES	2 200	2 255	2.400	2.502	2.722	2.015	4.050	4.110	4.010	4.222
Cash Receipts from Customers	3 309	3 355	3 488	3 593	3 723	3 915	4 052	4 119	4 218	4 322
Cash Paid to Suppliers and Employees	(1 189)	$(1\ 200)$	$(1\ 223)$	$(1\ 239)$	(1 262)	$(1\ 272)$	(1 324)	$(1\ 360)$	(1 416)	(1452)
Interest Paid	(1 326)	$(1\ 327)$	$(1\ 327)$	$(1\ 339)$	$(1\ 339)$	$(1\ 320)$	(1293)	$(1\ 213)$	$(1\ 189)$	$(1\ 173)$
Interest Received	19	21	35	48	61	70	82	61	75	90
	814	849	974	1 063	1 182	1 393	1 518	1 608	1 689	1 787
FINANCING ACTIVITIES										
Proceeds from Long Term Debt	390	580	190	190	(20)	(30)	(20)	(20)	(40)	(30)
Sinking Fund Withdrawals	293	99	-	-	60	100	700	13	30	-
Retirement of Long Term Debt	(402)	(450)	-	-	(60)	(70)	(700)	(13)	-	20
Other Financing Activities	(31)	(30)	(29)	(27)	(25)	(22)	(21)	(38)	(37)	(36)
	250	199	161	163	(45)	(22)	(41)	(58)	(47)	(46)
INVESTING ACTIVITIES										
Property Plant and Equipment net of contributions	(731)	(738)	(740)	(733)	(851)	(882)	(916)	(940)	(868)	(911)
Sinking Fund Payment	(267)	(265)	(273)	(285)	(298)	(306)	(313)	(291)	(302)	(312)
Other Investing Activities	(30)	(31)	(25)	(26)	(26)	(26)	(26)	(26)	(27)	(27)
•	(1 028)	(1 034)	(1 039)	(1 044)	(1 175)	(1 214)	(1 256)	(1 257)	(1 197)	(1 250)
Net Increase (Decrease) in Cash	36	14	96	182	(37)	157	221	293	446	491
Cash at Beginning of Year	(244)	(208)	(194)	(98)	(37) 85	48	205	426	719	1 165
Cash at End of Year	(208)	(194)	(98)	85	48	205	426	719	1 165	1 655
Cash at End of Teal	(208)	(194)	(30)	63	40	203	420	/17	1 103	1 000

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Electric Operations 50% DSM Savings including CEF14 Utility Costs Projected Operating Statement (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES										
General Consumers Revenue at approved rates	1 437	1 467	1 480	1 510	1 527	1 547	1 558	1 571	1 586	1 601
Additional General Consumers Revenue	-	58	119	186	256	331	408	489	576	668
BPIII Reserve Account	(30)	(33)	(34)	(36)	(11)	-	-	-	-	-
Extraprovincial	409	428	430	438	459	483	762	880	890	910
Other	15	14	14	14	15	15	15	15	16	16
	1 831	1 935	2 009	2 112	2 245	2 375	2 742	2 955	3 068	3 195
EXPENSES										
Operating and Administrative	486	542	552	558	571	586	601	607	619	631
Finance Expense	495	510	547	581	751	885	1 191	1 323	1 330	1 345
Depreciation and Amortization	405	401	422	445	521	524	612	666	736	752
Water Rentals and Assessments	124	123	112	112	112	114	124	127	132	132
Fuel and Power Purchased	134	131	196	210	216	213	240	271	266	277
Capital and Other Taxes	99	107	121	134	143	144	145	151	151	161
Corporate Allocation	9	8	8	8	8	8	8	8	8	8
	1 754	1 825	1 960	2 052	2 326	2 477	2 924	3 155	3 245	3 309
Non-Controlling Interest	25	12	8	7	5	4	10	0	(1)	(3)
Net Income	102	122	56	67	<u>(76)</u>	(98)	(171)	(199)	(178)	(117)
* Additional General Consumers Revenue										
Percent Increase	0.00%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	0.00%	3.95%	8.06%	12.32%	16.76%	21.37%	26.17%	31.15%	36.33%	41.72%
Financial Ratios										
Debt Ratio	78	82	84	85	86	87	88	89	90	90
Interest Coverage Ratio	1.16	1.17	1.07	1.07	0.93	0.92	0.87	0.85	0.87	0.91
Capital Coverage Ratio	0.98	1.03	0.93	1.10	0.91	0.84	0.83	0.96	1.11	1.24

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Electric Operations 50% DSM Savings including CEF14 Utility Costs Projected Operating Statement (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
REVENUES										
General Consumers Revenue at approved rates	1 617	1 633	1 649	1 665	1 681	1 698	1 716	1 734	1 753	1 772
Additional General Consumers Revenue	765	868	976	1 090	1 210	1 338	1 473	1 553	1 637	1 723
BPIII Reserve Account	-	-	-	-	-	-	-	-	-	-
Extraprovincial	913	840	849	824	817	863	848	816	813	810
Other	16	17	17	18	18	18	19	19	19	20
	3 312	3 358	3 491	3 596	3 726	3 918	4 056	4 123	4 222	4 325
EXPENSES										
Operating and Administrative	644	657	669	683	696	705	725	739	761	776
Finance Expense	1 346	1 343	1 331	1 331	1 313	1 289	1 248	1 194	1 156	1 128
Depreciation and Amortization	767	780	791	804	811	820	831	852	866	892
Water Rentals and Assessments	133	132	133	133	134	138	138	137	137	137
Fuel and Power Purchased	288	286	295	297	306	301	332	353	386	406
Capital and Other Taxes	162	163	164	165	166	168	170	172	175	176
Corporate Allocation	8	8	8	8	8	6	5	6	5	5
	3 351	3 372	3 395	3 424	3 438	3 432	3 452	3 457	3 490	3 526
Non-Controlling Interest	(5)	(2)	(3)	(5)	(6)	(10)	(12)	(15)	(17)	(19)
Net Income	(44)	(15)	93	167	281	476	591	651	714	781
* Additional General Consumers Revenue										
Percent Increase	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	2.00%	2.00%	2.00%
Cumulative Percent Increase	47.31%	53.13%	59.18%	65.47%	72.01%	78.80%	85.86%	89.58%	93.37%	97.24%
Financial Ratios										
Debt Ratio	90	90	90	89	87	85	83	81	78	75
Interest Coverage Ratio	0.97	0.99	1.07	1.12	1.21	1.36	1.46	1.53	1.60	1.67
Capital Coverage Ratio	1.28	1.33	1.49	1.60	1.72	2.06	2.11	2.22	2.29	2.38

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Electric Operations 50% DSM Savings including CEF14 Utility Costs Projected Balance Sheet (In Millions of Dollars)

For the year ended March 31										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSETS										
Plant in Service	17 163	17 912	19 127	19 988	24 957	28 333	33 202	33 846	34 478	35 142
Accumulated Depreciation	(5 676)	(6 012)	(6 392)	(6 795)	(7 270)	(7 798)	(8 403)	(9 055)	(9 721)	(10 401)
Net Plant in Service	11 487	11 900	12 735	13 193	17 687	20 535	24 800	24 791	24 757	24 741
Construction in Progress	3 257	4 932	6 755	8 982	6 040	3 939	169	185	241	263
Current and Other Assets	1 798	1 570	1 822	2 268	2 295	2 598	2 727	2 167	2 237	2 441
Goodwill and Intangible Assets	198	186	175	166	166	177	168	152	137	121
Regulated Assets	254	278	313	352	396	420	434	431	416	398
,	16 993	18 866	21 801	24 961	26 585	27 668	28 298	27 727	27 787	27 965
LIABILITIES AND EQUITY										
Long Term Debt	11 705	13 808	16 681	18 689	21 177	21 906	22 592	22 755	23 250	23 441
Current and Other Liabilities	2 016	2 145	2 092	3 061	2 192	2 615	2 758	2 253	1 966	2 032
Contributions in Aid of Construction	412	446	480	514	549	583	618	654	690	727
BPIII Reserve Account	49	81	116	152	163	109	54	-	-	-
Retained Earnings	2 717	2 784	2 841	2 908	2 832	2 734	2 563	2 364	2 186	2 069
Accumulated Other Comprehensive Income	94	(399)	(409)	(363)	(328)	(278)	(287)	(298)	(305)	(305)
	16 993	18 866	21 801	24 961	26 585	27 668	28 298	27 727	27 787	27 965

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Electric Operations 50% DSM Savings including CEF14 Utility Costs Projected Balance Sheet (In Millions of Dollars)

For the year ended March 31										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ASSETS										
Plant in Service	35 822	36 544	37 410	38 124	38 859	39 555	40 581	41 337	42 409	43 537
Accumulated Depreciation	(11 096)	(11 807)	(12 532)	(13 274)	(14 030)	(14 800)	(15 585)	(16 394)	(17 219)	(18 069)
Net Plant in Service	24 725	24 737	24 878	24 849	24 828	24 754	24 997	24 943	25 190	25 468
Construction in Progress	322	344	225	254	379	572	472	663	465	255
Current and Other Assets	2 386	2 536	2 785	3 104	3 268	3 733	3 500	4 019	4 654	5 370
Goodwill and Intangible Assets	107	93	80	68	57	45	34	23	11	(0)
Regulated Assets	374	353	333	313	300	295	293	296	304	311
	27 914	28 062	28 300	28 588	28 833	29 400	29 295	29 944	30 625	31 404
LIABILITIES AND EQUITY										
Long Term Debt	23 395	23 998	24 201	24 343	24 276	23 749	23 739	23 743	23 737	23 381
Current and Other Liabilities	2 034	1 556	1 462	1 404	1 396	1 976	1 251	1 207	1 140	1 454
Contributions in Aid of Construction	764	802	839	876	914	952	990	1 029	1 069	1 109
BPIII Reserve Account	-	-	-	-	-	-	-	-	-	-
Retained Earnings	2 025	2 010	2 103	2 269	2 550	3 027	3 618	4 268	4 983	5 763
Accumulated Other Comprehensive Income	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)	(304)
	27 914	28 062	28 300	28 588	28 833	29 400	29 295	29 944	30 625	31 404

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Electric Operations 50% DSM Savings including CEF14 Utility Costs Projected Cash Flow Statement (In Millions of Dollars)

For the year ended March 31

•	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING ACTIVITIES										
Cash Receipts from Customers	1 859	1 965	2 041	2 146	2 254	2 373	2 740	2 953	3 065	3 192
*										
Cash Paid to Suppliers and Employees	(803)	(872)	(947)	(981)	(1 009)	(1 024)	(1 075)	(1 107)	(1 132)	(1 165)
Interest Paid	(511)	(514)	(547)	(593)	(784)	(924)	(1 222)	(1 342)	(1 324)	(1 337)
Interest Received	13	15	21	30	35	34	31	28	15	16
	558	594	568	602	495	459	473	532	625	706
FINANCING ACTIVITIES										
Proceeds from Long Term Debt	1 953	2 390	3 190	3 200	2 790	1 600	1 390	600	760	580
Sinking Fund Withdrawals	110	21	-	7	448	204	293	716	165	26
Retirement of Long Term Debt	(800)	(312)	(334)	(330)	(1 195)	(315)	(850)	(718)	(441)	(290)
Other Financing Activities	(45)	(22)	(20)	(20)	(30)	(19)	(101)	(25)	(41)	(32)
·	1 218	2 077	2 836	2 857	2 013	1 470	733	573	443	284
INVESTING ACTIVITIES										
Property Plant and Equipment net of contributions	(1 900)	(2 518)	(3 134)	(3 244)	(2 253)	(1 550)	(1 010)	(756)	(698)	(697)
Sinking Fund Payment	(125)	(202)	(168)	(243)	(241)	(245)	(262)	(358)	(252)	(258)
Other Investing Activities	(21)	(21)	(21)	(21)	(21)	(35)	(30)	(30)	(30)	(30)
	(2 046)	(2 742)	(3 323)	(3 508)	(2 516)	(1 830)	(1 302)	(1 144)	(980)	(985)
Net Increase (Decrease) in Cash	(270)	(71)	81	(49)	(8)	99	(95)	(40)	88	5
Cash at Beginning of Year	133	(137)	(208)	(127)	(176)	(184)	(85)	(180)	(220)	(132)
Cash at End of Year	(137)	(208)	(127)	(176)	(184)	(85)	(180)	(220)	(132)	(127)
		\ /	\ /	\ /	\ /	\ /	\ /	` /	\ /	

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Electric Operations 50% DSM Savings including CEF14 Utility Costs Projected Cash Flow Statement (In Millions of Dollars)

For the	year	e nde d	March	31
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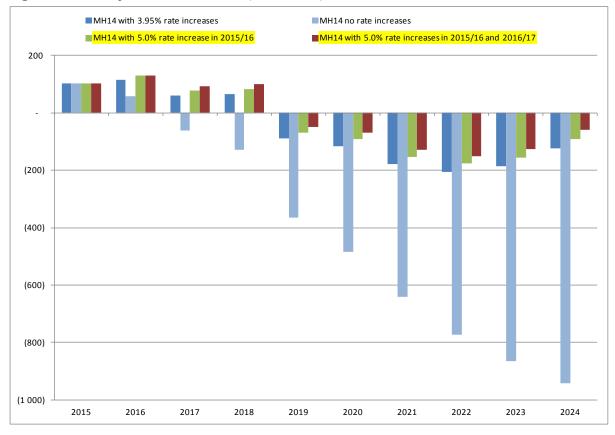
·	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPERATING ACTIVITIES										
Cash Receipts from Customers	3 309	3 355	3 488	3 593	3 723	3 915	4 052	4 119	4 218	4 322
Cash Paid to Suppliers and Employees	(1 190)	$(1\ 200)$	(1223)	(1240)	(1 263)	(1273)	(1 324)	(1 360)	(1 416)	(1 452)
Interest Paid	(1 345)	(1346)	(1 347)	$(1\ 362)$	$(1\ 364)$	(1344)	(1324)	(1247)	(1225)	$(1\ 211)$
Interest Received	19	21	35	48	62	71	83	63	77	92
	794	830	952	1 040	1 158	1 369	1 487	1 575	1 655	1 750
FINANCING ACTIVITIES										
Proceeds from Long Term Debt	390	580	190	190	(20)	170	(20)	(20)	(40)	(30)
Sinking Fund Withdrawals	296	102	-	-	60	100	700	13	30	-
Retirement of Long Term Debt	(402)	(450)	-	-	(60)	(70)	(700)	(13)	-	20
Other Financing Activities	(31)	(30)	(29)	(27)	(25)	(22)	(21)	(38)	(37)	(36)
	253	202	161	163	(45)	178	(41)	(58)	(47)	(46)
INVESTING ACTIVITIES										
Property Plant and Equipment net of contributions	(744)	(751)	(752)	(745)	(864)	(895)	(931)	(955)	(884)	(928)
Sinking Fund Payment	(270)	(269)	(277)	(290)	(302)	(312)	(320)	(298)	(309)	(320)
Other Investing Activities	(30)	(31)	(25)	(26)	(26)	(26)	(26)	(26)	(27)	(27)
	(1 044)	(1 050)	(1 055)	(1 061)	(1 192)	(1 233)	(1 277)	(1 279)	(1 220)	(1 274)
Net Increase (Decrease) in Cash	3	(19)	59	143	(79)	314	169	238	388	430
Cash at Beginning of Year	(127)	(124)	(143)	(84)	59	(21)	293	462	700	1 088
Cash at End of Year	(124)	(143)	(84)	59	(21)	293	462	700	1 088	1 518

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a)

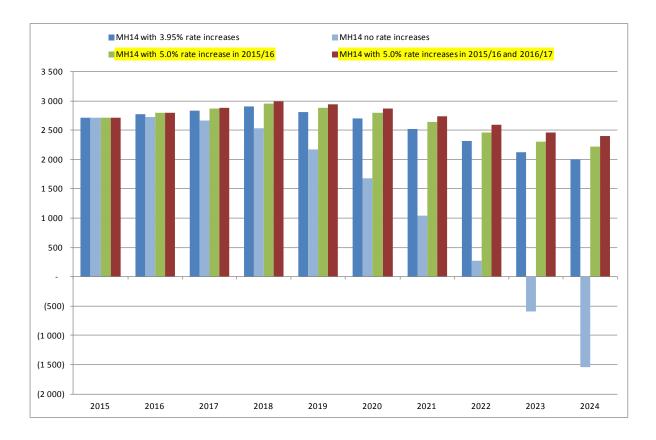
Figure 2.19: Projected Net Income (2015-2024)



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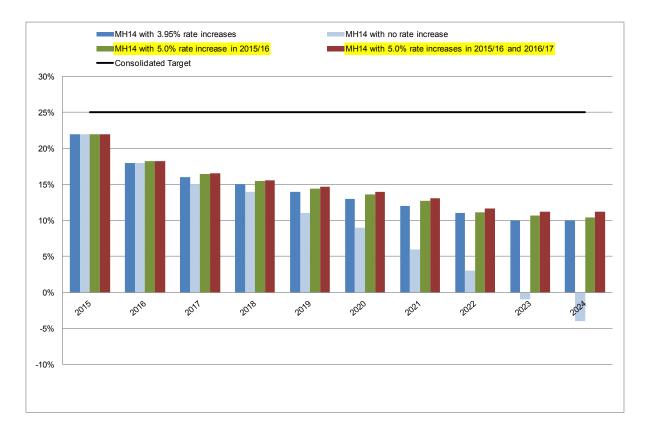
Figure 2.20: Projected Retained Earnings (2015-2024)



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Figure 2.21: Projected Equity Ratio (2015-2024)



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Figure 2.25: Net Income from Electric Operations – Part (a) (i)

Not In	come -	Flac	tricity	Onera	tione
Netilli	come -	CIEL	LIICILV	Obela	แบบร

							For	ecast		
(in millions of \$)	2	2013	2	2014	:	2015	20	016	2	017
Revenue										
General Consumers Revenue										
- at approved rates	\$	1 341	\$	1 424	\$	1 401	\$	1 415	\$	1 421
- Bipole III Reserve		-		(19)		(30)		(33)		(34)
Extraprovincial Revenue (net of Fuel & Power Purchased and Water Rentals))	101		137		150		181		147
Other Revenue		30		22		15		14		14
		1 472		1 564		1 537		1 578		1 548
Expenses		1 407		1 439		1 495		1 570		1 651
Operating, Maintenance and Administrative		463		481		486		542		552
Finance Expense		452		435		495		510		546
Depreciation and Amortization		392		411		405		401		422
Capital and Other Taxes		86		97		99		107		121
Corporate Allocation		9		9		9		8		8
Other expenses		5		6		2		2		2
Non-controlling Interest		13		22		25		12		8
Net Income (loss) before proposed rate increases	\$	78	\$	147	\$	67	\$	19	\$	(96)
Proposed rate increases (2.75% May 1, 2014, 5.00% April 1, 2015, and 3.95%	April	I 1, 201	6)			35		112		173
Net Income including proposed rate increases	\$	78	\$	147	\$	102	\$	131	\$	<mark>77</mark>

Retained Earnings (electric operations)	\$ 2 468	\$ 2 615	\$ 2 681	\$ 2 646	\$ 2 549
Debt to Equity Ratio (electric operations)	75:25	77:23	78:22	83:17	85:15
Interest Coverage Ratio (electric operations)	1.13	1.25	1.11	1.03	0.88
Capital Coverage Ratio (electric operations)	1.26	1.39	0.92	0.84	0.66

Retained Earnings and Financial Ratios (including proposed rate increases)

Retained Earnings (electric operations)	\$ 2 468	\$ 2 615	\$ 2 717	\$ 2 794	\$ 2 870
Debt to Equity Ratio (electric operations)	75:25	77:23	78:22	82:18	84:16
Interest Coverage Ratio (electric operations)	1.13	1.25	1.16	1.18	1.09
Capital Coverage Ratio (electric operations)	1.26	1.39	0.98	1.04	0.97

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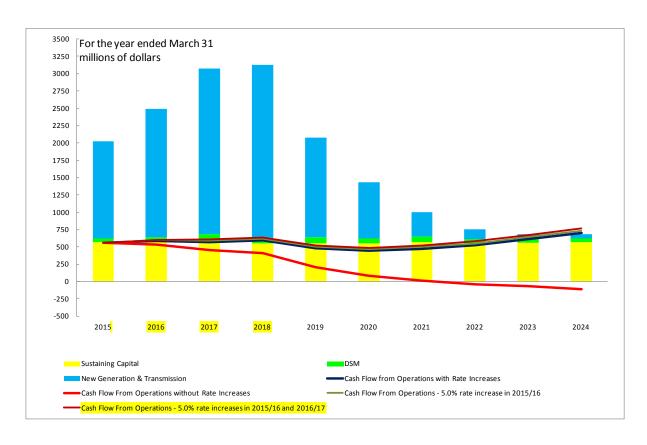
Figure 2.25: Net Income from Electric Operations – Part (a) (ii)

Net Income - Electricity Ope	rat	ions							
						Fo	recast		
(in millions of \$)		2013		2014	2015		2016	:	2017
Revenue									
General Consumers Revenue									
- at approved rates	\$	1 341	\$	1 424	\$ 1 401	\$	1 415	\$	1 421
- Bipole III Reserve		-		(19)	(30)		(33)		(34)
Extraprovincial Revenue (net of Fuel & Power Purchased and Water Rentals)		101		137	150		181		147
Other Revenue		30		22	15		14		14
	_	1 472		1 564	1 537		1 578		1 547
Expenses		1 407		1 439	1 495		1 570		1 651
Operating, Maintenance and Administrative		463		481	486		542		552
Finance Expense		452		435	495		510		546
Depreciation and Amortization		392		411	405		401		422
Capital and Other Taxes		86		97	99		107		121
Corporate Allocation		9		9	9		8		8
Other expenses		5		6	2		2		2
Non-controlling Interest		13		22	25		12		8
Net Income (loss) before proposed rate increases	\$	78	\$	147	\$ 67	\$	19	\$	(96)
Proposed rate increases (2.75% May 1, 2014, 5.00% April 1, 2015, and 5.00%	Ар	ril 1, 20	16)		35		112		189
Net Income including proposed rate increases	\$	78	\$	147	\$ 102	\$	131	\$	93
Retained Earnings and Financial Ratios (without proposed rate increase	 s)								
Retained Earnings (electric operations)	\$	2 468	\$	2 615	\$ 2 681	\$	2 646	\$	2 549
Debt to Equity Ratio (electric operations)		75:25		77:23	78:22		83:17		85:15
Interest Coverage Ratio (electric operations)		1.13		1.25	1.11		1.03		0.88
Capital Coverage Ratio (electric operations)		1.26	i	1.39	0.92		0.84		0.66
Retained Earnings and Financial Ratios (including proposed rate increa	se s)							
Retained Earnings (electric operations)	_	2 468	\$	2 615	\$ 2 717	\$	2 794	\$	2 886
Debt to Equity Ratio (electric operations)	*	75:25		77:23	78:22	*	82:18	Ψ	83:17
Interest Coverage Ratio (electric operations)		1.13		1.25	1.16		1.18		1.11
				1.39					

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Figure 2.30: Electricity Capital Expenditures and Cash Flow from Operations Including and Excluding Proposed and Indicative Rate Increases



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b) i. A 5% rate increase in 2015/16 and 3.95% rate increases in each year through 2034

Appendix 11.12 - Detailed debt to equity ratio, capital coverage ratio and interest coverage ratio, net assets, net income, total debt and retained earnings

Fiscal	Debt/	Capital	Interest						
Year	Equity	Coverage	Coverage	Total	Net	Total	Retained		
Ended	Ratio	Ratio	Ratio	Assets	Income	Debt	Earnings		
2015	78:22	0.98	1.16	16 993	102	11 854	2 717		
2016	82:18	1.04	1.18	18 866	131	14 031	2 794		
2017	84:16	0.97	1.09	21 800	77	16 786	2 870		
2018	85:15	1.12	1.08	24 961	83	19 695	2 953	—(\$752M)	
2019	86:14	0.91	0.94	26 585	(68)	21 296	2 885		
2020	86:14	0.85	0.92	27 668	(92)	22 455	2 793		
2021	87:13	0.87	0.88	28 298	(153)	23 068	2 640		
2022	89:11	0.99	0.87	27 727	(177)	22 977	2 464		
2023	89:11	1.14	0.88	27 786	(156)	23 192	2 308		
2024	90:10	1.28	0.93	27 963	(90)	23 452	2 218		
2025	89:11	1.32	0.99	27 912	(16)	23 413	2 202		
2026	89:11	1.38	1.01	28 060	16	23 534	2 218		
2027	89:11	1.55	1.10	28 296	129	23 630	2 346		
2028	88:12	1.66	1.15	28 664	202	23 783	2 548		
2029	86:14	1.77	1.24	28 922	316	23 706	2 863		
2030	84:16	2.02	1.35	29 285	456	23 609	3 318		
2031	82:18	2.12	1.47	29 183	595	22 892	3 913		
2032	79:21	2.37	1.65	29 952	771	22 863	4 683		
2033	75:25	2.56	1.80	30 840	922	22 827	5 604		
2034	70:30	2.79	2.00	31 940	1 103	22 821	6 707		

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b) ii. A 5% increase in rates in 2015/16 and 2016/17 followed by 3.95 rate increases in each subsequent year.

Appendix 11.12 - Detailed debt to equity ratio, capital coverage ratio and interest coverage ratio, net assets, net income, total debt and retained earnings

Fiscal	Debt/	Capital	Interest					
Year	Equity	Coverage	Coverage	Total	Net	Total	Retained	
Ended	Ratio	Ratio	Ratio	Assets	Income	Debt	Earnings	
2015	78:22	0.98	1.16	16 993	102	11 854	2 717	
2016	82:18	1.04	1.18	18 866	131	14 031	2 794	
2017	83:17	1.00	1.11	21 800	93	16 770	2 886	(\$582M)
2018	84:16	1.16	1.10	24 961	101	19 661	2 987	(+ /
2019	85:15	0.95	0.96	26 585	(48)	21 239	2 939	
2020	86:14	0.88	0.94	27 667	(69)	22 378	2 869	
2021	87:13	0.91	0.90	28 298	(128)	22 973	2 742	
2022	88:12	1.05	0.89	27 727	(151)	22 853	2 591	
2023	89:11	1.20	0.90	27 785	(127)	23 038	2 463	
2024	89:11	1.34	0.96	27 962	(59)	23 267	2 404	
2025	89:11	1.38	1.01	27 910	19	23 192	2 424	
2026	88:12	1.44	1.04	28 058	54	23 275	2 477	
2027	87:13	1.61	1.13	28 354	170	23 391	2 646	
2028	86:14	1.72	1.19	28 603	247	23 383	2 893	
2029	85:15	1.84	1.28	28 911	367	23 306	3 259	
2030	82:18	2.10	1.40	29 327	509	23 209	3 768	
2031	80:20	2.20	1.53	29 283	652	22 492	4 419	
2032	76:24	2.46	1.72	30 113	832	22 463	5 250	
2033	72:28	2.65	1.88	31 066	987	22 427	6 237	
2034	68:32	2.89	2.09	32 236	1 172	22 421	7 409	

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Section:	Tab 2 Figures 2.14, 2.15, 2.16,2.17	Page No.:	PUB/MH I-2				
Topic:	Capital expenditures						
Subtopic:	Cash Flow						
Issue:	Major & Sustaining Capital Expenditures Impact on Revenue Requirement						

PREAMBLE TO IR (IF ANY):

QUESTION:

- a) Please update the graph assuming a 5.3% annual rate increase consistent with PUB/MH I-7 (c).
- b) Please update the graph consistent with the response to PUB/MH II-1 b and PUB/MH II-1 (c).

RATIONALE FOR QUESTION:

To assess the changes in capital expenditures and cash flow forecast given historical levels of spending.

RESPONSE:

Please find the updated graphs below.

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