#### **Reference: Domestic Load Forecasts**

a) MH's domestic load forecasts vary depending on the source document. Please explain by detailed example the following differences in domestic load for 2015/16.

•	2009 Base Power Resource Plan (Appendix 47, Page 12)	27,137 GWh
•	IFF 09-1 Assumptions (PUB/MH II-45(a))	26,439 GWh
•	May 2009 Net Firm Energy (PUB/MH II-194(a))	26,973 GWh
•	August 2010 Net Firm Energy	26,020 GWh

## **ANSWER**:

## Reconciliation of the 2015/16 Manitoba Domestic Load May 2009 Forecast

#### GW.h

<u></u>	<u>IFF09-1</u>	May 2009 Net Firm Energy
Gross Manitoba Hydro Electric Domestic Load	27,137	27,137
Demand Side Management Conawapa Construction Power Keeyask Construction Power Pointe Du Bois Construction Power	(798) 15 50 35	- - -
Station Service at Generation	-	(164)
Adjusted Domestic Load	26,439	26,973

## Reconciliation of the 2015/16 Manitoba Domestic Load August 2010 Forecast

#### GW.h

<u></u>	August 2010 Net Firm Energy
Gross Manitoba Hydro Electric Domestic Load	26,599
Demand Side Management Conawapa Construction Power Keeyask Construction Power Pointe Du Bois Construction Power Station Service at Generation	- - - - (160)
Adjusted Domestic Load	26,438

Note: The August 2010 Net Firm Energy for 2015/16 is actually 26,438 GW.h (per the 2010 Domestic Load Forecast), the 26,020 GW.h presented in the question was the value for 2014/15.

#### **Reference: Domestic Load Forecasts**

- b) Please indicate the appropriate values for 2015/16 as employed in IFF 09: IFF 10:
  - At Generation (GWh).
  - At Common Bus (GWh).
  - At Point of Sale

and account for the differences (e.g., domestic transmission losses/DSM/etc.).

#### **ANSWER:**

## Reconciliation of the 2015/16 Manitoba Domestic Load May 2009 Forecast (IFF09)

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	At Generation	At Common Bus	At Point of Sale
Gross Manitoba Hydro Electric Domestic Load	27,137	27,137	27,137
Station Service at Generation Demand Side Management High Voltage Transmission Losses Distribution System Transmission Losses Construction Power	(164) (798) - - 100	(164) (673) (2,214) -	(164) (624) (2,214) (1,195)
Adjusted Domestic Load	26,275	24,086	22,940

## Reconciliation of the 2015/16 Manitoba Domestic Load August 2010 Forecast (IFF10)

#### GW.h

·	At Generation	At Common Bus	At Point of Sale
Gross Manitoba Hydro Electric Domestic Load	26,599	26,599	26,599
Station Service at Generation	(160)	(160)	(160)
Demand Side Management	(824)	(631)	(573)
High Voltage Transmission Losses	-	(2,148)	(2,148)
Distribution System Transmission Losses	-	-	(1,073)
Construction Power	60	-	-
Adjusted Domestic Load	25,674	23,660	22,645

**Reference: Domestic Load Forecasts** 

c) Please confirm that the average domestic energy sales prices shown in PUB/MH II-45(a) and in PUB/MH 208(a) do not account for domestic transmission losses.

## **ANSWER:**

Confirmed. For the corresponding table for IFF10 provided in PUB/MH/PRE-ASK-2, domestic losses have been deducted from the Domestic Energy Sales and therefore excluded from the domestic energy sales prices.

**Reference: Domestic Load Forecasts** 

d) If not confirmed in 'c' above, please indicate how the domestic transmission losses are reflected in the total supply/demand balance(s) in PUB/MH II-45(a).

## **ANSWER:**

Confirmed in (c).

**Reference:** 2009/10 to 2014/15 Net Exports

It appears that PUB/MH II-45(a) IFF 09-1 assumptions on exports and fuel and power purchases over the 2009/10 to 2014/15 period may not reflect the current energy supply

situation.

Please provide a partial (2009/10 to 2014/15) update of PUB/MH II-45(a) to reflect:

• \$5/GJ natural gas to 2015.

• No CO<sub>2</sub> pricing to 2015.

• Continuation of U.S. economic downturn to 2015.

**ANSWER:** 

In the responses to PUB/MH I-156(a) and PUB/MH/RISK-11(a), Manitoba Hydro advised that the corporation is unable to produce alternative electricity export price forecasts, and consequently alternative IFF scenarios, which vary specific pricing factors. In addition, Manitoba Hydro has no internal forecasting processes to derive prices from specific factors such as those noted in this information request.

The 2010 Integrated Financial Forecast IFF10 (see Appendix 76) incorporates the corporation's most current energy supply assumptions which consider lower natural gas prices and more current energy policy and U.S. economic expectations. PUB/MH II-45(a) has been updated in the schedule below to reflect IFF10.

#### IFF10 Export Revenue Assumptions

(in GWh)	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
MH Hydraulic Generation	34,066	31,360	30,632	30,801	30,747	30,755	30,772	30,588	30,543	30,648
MH Thermal Generation	80	89	413	410	391	379	390	424	437	206
Import Energy (including Wind)	1,686	2,972	2,054	2,130	2,153	2,173	2,247	2,265	2,309	3,400
Manitoba Domestic Energy Sales	21,049	21,406	21,663	22,106	22,339	22,633	22,970	23,181	23,405	23,703
Domestic energy Losses	2,922	3,015	2,874	2,971	3,008	3,067	3,185	2,931	2,981	3,017
Total Export Sales	10,870	9,156	7,839	7,571	7,281	6,976	6,659	6,579	6,343	6,966
Export Transmission Losses	991	844	723	692	662	631	595	586	561	568
(in Millions of Dollars)	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
MH Hydraulic Generation	\$ 114	\$ 107	\$ 102	\$ 103	\$ 103	\$ 103	\$ 103	\$ 102	\$ 102	\$ 102
MH Thermal Generation	6	5	33	36	39	40	43	50	53	30
Import Energy (including Wind)	49	117	118	127	135	141	151	156	164	239
Other Costs	2	2	3	3	3	3	3	3	3	3
Total Manitoba Domestic Energy Sales	1,194	1,264	1,322	1,389	1,451	1,518	1,591	1,661	1,736	1,818
Total Export Sales	354	379	460	469	486	566	575	599	607	755
Average Price (\$/MWh)	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
MH Hydraulic Generation	\$ 3.34	\$ 3.41	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34	\$ 3.34
MH Thermal Generation	73.15	56.97	80.74	88.71	98.82	106.16	111.17	117.14	122.15	145.98
Import Energy (including Wind)	29.33	39.47	57.30	59.55	62.90	64.99	67.10	69.03	71.04	70.20
Total Manitoba Domestic Energy Sales @ meter	56.74	59.06	61.02	62.85	64.93	67.07	69.27	71.65	74.16	76.69
Total Export Sales	32.58	41.38	58.65	61.99	66.77	81.14	86.38	91.09	95.64	108.41

Note: Manitoba Domestic Energy Sales removes the effects of domestic energy losses which is an enhancement to this schedule since PUB/MH II-45(a) was prepared.

**Reference:** Revised IFF Pricing

Please provide the various 20-year IFF scenarios requested in PUB/MH/RISK-53 a) to d) using market pricing as follows:

- Current market prices to 2014/15.
- NSP/Xcel contract aggregated pricing from 2015/16 to 2025/26.
- Pending 500 MW WPS and 250 MW MP Contracts with aggregated NSP/Xcel pricing levels.
- Projected (no Carbon Adder) day-ahead market pricing for all opportunity exports and non-contract imports.
- a) In MH's recommended 20-year IFF 09-1 (as per PUB/MH/Risk II-53(a)).

#### **ANSWER:**

Manitoba Hydro has provided IFF10 in Appendix 76 which reflects current expectations regarding market pricing in 2010/11 and 2011/12, the 2010 forecast of export prices for 2012/13 to the end of the IFF period in 2019/20, and the terms and conditions of the final NSP agreements. Manitoba Hydro is unable to provide an alternative forecast which includes revised revenues specifying WPS and MP proposed sales at NSP prices or no carbon adders due to the potential to provide insights into the specific contract pricing which is commercially sensitive.

IFF10 provides the financial impacts of low and high export price sensitivities (Appendix 76, p. 18). The low export price sensitivity reflects a scenario of reduced carbon adders, low gas prices and other factors contributing to lower long-term firm contract and opportunity electricity prices. The projected financial statements supporting the low and high export price sensitivities are found below.

# CONSOLIDATED PROJECTED OPERATING STATEMENT (IFF10) LOW EXPORT PRICES (In Millions of Dollars)

For the year ended March 31										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
REVENUES										
General Consumers	1,610	1,719	1,792	1,854	1,918	1,988	2,064	2,133	2,210	2,294
Extraprovincial	444	461	436	447	469	527	539	561	572	712
	2,054	2,180	2,228	2,301	2,387	2,515	2,604	2,694	2,782	3,006
Cost of Gas Sold	273	311	320	310	309	309	308	306	304	303
	1,781	1,869	1,908	1,991	2,077	2,206	2,296	2,387	2,477	2,703
Other	28	31	33	33	34	34	35	36	36	37
	1,809	1,900	1,941	2,024	2,111	2,241	2,331	2,423	2,513	2,740
EXPENSES										
Operating and Administrative	476	482	495	505	515	526	536	559	570	589
Finance Expense	430	449	513	499	566	593	593	623	697	770
Depreciation and Amortization	403	435	464	468	495	517	524	543	573	589
Water Rentals and Assessments	121	115	111	112	112	112	113	113	113	113
Fuel and Power Purchased	121	187	175	187	200	208	221	230	241	284
Capital and Other Taxes	100	102	106	112	118	126	134	143	153	162
•	1,650	1,771	1,865	1,883	2,006	2,082	2,121	2,210	2,346	2,506
Non-controlling Interest	-	4	13	11	9	3	0	(2)	(6)	(10)
Net Income	158	134	89	152	114	162	210	211	162	224
Additional General Consumers Revenue										
General electricity rate increases		2.90%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
General gas rate increases		0.00%	1.50%	1.00%	1.00%	1.00%	1.00%	0.00%	1.00%	1.00%
Financial Ratios										
Equity	26%	26%	23%	22%	21%	19%	19%	18%	17%	17%
Interest Coverage	1.28	1.22	1.14	1.22	1.15	1.19	1.22	1.20	1.14	1.17
Capital Coverage	1.50	1.50	1.43	1.20	1.24	1.46	1.55	1.57	1.49	1.65

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# CONSOLIDATED PROJECTED BALANCE SHEET (IFF10) LOW EXPORT PRICES (In Millions of Dollars)

For the year ended March 31										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ASSETS										
Plant in Service Accumulated Depreciation	13,226 (4,971)	15,218 (5,350)	15,744 (5,762)	16,319 (6,184)	17,485 (6,588)	18,051 (7,033)	18,632 (7,509)	21,056 (8,012)	21,893 (8,547)	25,741 (9,100)
Net Plant in Service	8,255	9,868	9,982	10,135	10,898	11,018	11,123	13,044	13,346	16,640
Construction in Progress Current and Other Assets Goodwill and Intangible Assets Regulated Assets	2,624 1,409 227 307	1,636 1,512 215 321	2,216 1,307 200 332	3,091 1,026 187 335	3,457 1,167 179 331	4,792 1,382 169 318	6,042 1,582 163 300	5,825 1,853 175 279	7,283 1,641 181 256	5,522 1,850 188 234
	12,822	13,552	14,038	14,774	16,032	17,679	19,209	21,176	22,708	24,434
LIABILITIES AND EQUITY										
Long-Term Debt Current and Other Liabilities Contributions in Aid of Construction Retained Earnings Accumulated Other Comprehensive Income	8,524 1,339 295 2,398 266	8,944 1,516 294 2,531 266	8,966 2,153 288 2,616 14	10,292 1,462 282 2,769 (31)	11,533 1,483 278 2,883 (145)	13,189 1,387 275 3,045 (217)	14,061 1,849 272 3,255 (228)	15,606 2,079 270 3,466 (245)	17,492 1,574 267 3,627 (253)	15,092 5,485 265 3,851 (259)
	12,822	13,552	14,038	14,774	16,032	17,679	19,209	21,176	22,708	24,434

## CONSOLIDATED PROJECTED CASH FLOW STATEMENT (IFF10) LOW EXPORT PRICES (In Millions of Dollars)

#### For the year ended March 31

- -	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPERATING ACTIVITIES										
Cash Receipts from Customers	2,146	2,282	2,331	2,404	2,485	2,614	2,703	2,793	2,881	3,106
Cash Paid to Suppliers and Employees	(1,187)	(1,288)	(1,286)	(1,312)	(1,335)	(1,358)	(1,390)	(1,430)	(1,460)	(1,530)
Interest Paid	(420)	(453)	(512)	(513)	(561)	(600)	(610)	(650)	(732)	(788)
Interest Received	` 25 <sup>´</sup>	29	30	26	` 16 <sup>′</sup>	26	` 39 <sup>°</sup>	` 49 <sup>°</sup>	53	` 48 <sup>°</sup>
- -	564	570	563	606	604	682	741	763	742	836
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1,000	600	800	1,400	1,450	1,800	1,400	2,400	2,200	1,800
Sinking Fund Withdrawals	651	25	128	463	· -	9	´-	´-	444	167
Retirement of Long-Term Debt	(1,025)	(25)	(182)	(829)	(100)	(312)	(201)	(530)	(857)	(317)
Other	(229)	18	(12)	(7)	(0)	(3)	(2)	(1)	(11)	O
	398	618	735	1,027	1,350	1,494	1,197	1,869	1,776	1,650
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1,174)	(1,087)	(1,148)	(1,476)	(1,606)	(1,944)	(1,850)	(2,235)	(2,315)	(2,218)
Sinking Fund Payment	(119)	(99)	(117)	(167)	(111)	(200)	(158)	(239)	(199)	(227)
Other	(21)	(16)	(17)	(16)	(17)	(36)	(46)	(27)	(27)	(27)
-	(1,314)	(1,202)	(1,281)	(1,659)	(1,734)	(2,180)	(2,054)	(2,502)	(2,540)	(2,472)
Net Increase (Decrease) in Cash	(352)	(14)	16	(26)	220	(4)	(115)	131	(22)	14
Cash at Beginning of Year	158	(193)	(207)	(191)	(218)	2	(2)	(117)	14	(8)
Cash at End of Year	(193)	(207)	(191)	(218)	2	(2)	(117)	14	(8)	6

## CONSOLIDATED PROJECTED OPERATING STATEMENT (IFF10) HIGH EXPORT PRICES (In Millions of Dollars)

For the year ended March 31										
•	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
REVENUES										
General Consumers	1,610	1,719	1,792	1,854	1,918	1,988	2,064	2,133	2,210	2,294
Extraprovincial	444	461	589	621	659	797	826	865	884	1,082
	2,054	2,180	2,380	2,474	2,576	2,786	2,891	2,998	3,093	3,375
Cost of Gas Sold	273	311	320	310	309	309	308	306	304	303
	1,781	1,869	2,060	2,164	2,267	2,477	2,583	2,692	2,789	3,073
Other	28	31	33	33	34	34	35	36	36	37
	1,809	1,900	2,093	2,198	2,301	2,511	2,618	2,727	2,825	3,110
EXPENSES										
Operating and Administrative	476	482	495	505	515	526	536	559	570	589
Finance Expense	430	449	510	490	551	568	552	564	620	671
Depreciation and Amortization	403	435	464	468	495	517	524	543	573	589
Water Rentals and Assessments	121	115	111	112	112	113	113	113	113	113
Fuel and Power Purchased	121	187	212	233	254	269	292	308	328	420
Capital and Other Taxes	100	102	106	112	118	126	134	143	152	161
·	1,650	1,771	1,899	1,920	2,046	2,117	2,151	2,230	2,356	2,543
Non-controlling Interest	-	4	(2)	(7)	(13)	(15)	(18)	(21)	(24)	(26)
Net Income	158	134	191	270	242	379	449	476	445	540
Additional General Consumers Revenue										
General electricity rate increases		2.90%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
General gas rate increases		0.00%	1.50%	1.00%	1.00%	1.00%	1.00%	0.00%	1.00%	1.00%
Financial Ratios										
Equity	26%	26%	24%	24%	23%	23%	23%	24%	24%	24%
Interest Coverage	1.28	1.22	1.30	1.40	1.32	1.46	1.49	1.49	1.42	1.46
Capital Coverage	1.50	1.50	1.74	1.46	1.54	1.97	2.11	2.14	2.10	2.31

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# CONSOLIDATED PROJECTED BALANCE SHEET (IFF10) HIGH EXPORT PRICES (In Millions of Dollars)

For the year ended March 31										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ASSETS										
Plant in Service Accumulated Depreciation	13,226 (4,971)	15,218 (5,350)	15,744 (5,762)	16,319 (6,184)	17,485 (6,588)	18,051 (7,033)	18,632 (7,509)	21,056 (8,012)	21,893 (8,547)	25,740 (9,100)
Net Plant in Service	8,255	9,868	9,982	10,135	10,898	11,018	11,123	13,044	13,346	16,640
Construction in Progress Current and Other Assets Goodwill and Intangible Assets Regulated Assets	2,624 1,409 227 307	1,636 1,512 215 321	2,216 1,307 200 332	3,091 1,047 187 335	3,457 1,152 179 331	4,792 1,354 169 318	6,042 1,625 163 300	5,825 1,876 175 279	7,283 1,549 181 256	5,522 1,826 188 234
	12,822	13,552	14,038	14,795	16,017	17,651	19,252	21,198	22,616	24,411
LIABILITIES AND EQUITY										
Long-Term Debt Current and Other Liabilities Contributions in Aid of Construction Retained Earnings Accumulated Other Comprehensive Income	8,524 1,339 295 2,398 266	8,944 1,516 294 2,531 266	8,966 2,050 288 2,719 14	10,296 1,262 282 2,989 (35)	11,111 1,569 278 3,231 (173)	12,584 1,443 275 3,611 (262)	13,456 1,738 272 4,060 (274)	14,602 2,081 270 4,536 (291)	16,088 1,577 267 4,982 (298)	13,688 5,241 265 5,522 (305)
	12,822	13,552	14,038	14,795	16,017	17,651	19,252	21,198	22,616	24,411

## CONSOLIDATED PROJECTED CASH FLOW STATEMENT (IFF10) HIGH EXPORT PRICES (In Millions of Dollars)

#### For the year ended March 31

-	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPERATING ACTIVITIES										
Cash Receipts from Customers	2,146	2,282	2,483	2,578	2,675	2,884	2,990	3,097	3,193	3,476
Cash Paid to Suppliers and Employees	(1,187)	(1,288)	(1,323)	(1,358)	(1,390)	(1,419)	(1,460)	(1,508)	(1,547)	(1,665)
Interest Paid	(420)	(453)	(508)	(509)	(550)	(573)	(562)	(597)	(654)	(685)
Interest Received	25	29	30	26	16	26	39	49	53	47
- -	564	570	682	737	751	918	1,006	1,042	1,045	1,173
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1,000	600	800	1,400	1,000	1,600	1,400	2,000	1,800	1,600
Sinking Fund Withdrawals	651	25	128	463	-	7	_	-	444	167
Retirement of Long-Term Debt	(1,025)	(25)	(182)	(829)	(100)	(312)	(201)	(530)	(857)	(317)
Other	(229)	18	(12)	(7)	(1)	(6)	(6)	(6)	(17)	(7)
-	398	618	735	1,027	899	1,289	1,193	1,464	1,370	1,443
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1,174)	(1,087)	(1,148)	(1,476)	(1,606)	(1,944)	(1,850)	(2,235)	(2,315)	(2,218)
Sinking Fund Payment	(119)	(99)	(117)	(167)	(110)	(199)	(157)	(239)	(198)	(226)
Other	(21)	(16)	(17)	(16)	(17)	(36)	(46)	(27)	(27)	(27)
-	(1,314)	(1,202)	(1,281)	(1,659)	(1,733)	(2,179)	(2,053)	(2,501)	(2,540)	(2,472)
Net Increase (Decrease) in Cash	(352)	(14)	136	105	(83)	28	146	4	(124)	144
Cash at Beginning of Year	158	(193)	(207)	(72)	33	(51)	(23)	123	127	3
Cash at End of Year	(193)	(207)	(72)	33	(51)	(23)	123	127	3	147

**Reference:** Revised IFF Pricing

Please provide the various 20-year IFF scenarios requested in PUB/MH/RISK-53 a) to d) using market pricing as follows:

- Current market prices to 2014/15.
- NSP/Xcel contract aggregated pricing from 2015/16 to 2025/26.
- Pending 500 MW WPS and 250 MW MP Contracts with aggregated NSP/Xcel pricing levels.
- Projected (no Carbon Adder) day-ahead market pricing for all opportunity exports and non-contract imports.
- b) In a modified 20-year IFF 09-1 assuming <u>no</u> WPS or MP contracts and no new G&T projects (as per PUB/MH/Risk II-53(b)).

#### **ANSWER**:

Assuming no potential firm sales and no new generation, additional system firm energy would be required by 2021/22 to meet Manitoba domestic demand. A scenario with no major G&T projects as requested is not feasible as new resources are required to meet Manitoba requirements beyond 2021/22.

**Reference:** Revised IFF Pricing

Please provide the various 20-year IFF scenarios requested in PUB/MH/RISK-53 a) to d) using market pricing as follows:

- Current market prices to 2014/15.
- NSP/Xcel contract aggregated pricing from 2015/16 to 2025/26.
- Pending 500 MW WPS and 250 MW MP Contracts with aggregated NSP/Xcel pricing levels.
- Projected (no Carbon Adder) day-ahead market pricing for all opportunity exports and non-contract imports.
- c) In a modified IFF 09-1, assuming <u>no</u> WPS or MP contracts with Keeyask G.S. and Bipole III, but without Conawapa G.S. (as per PUB/MH II-53(c)).

#### **ANSWER:**

In the response to PUB/MH/RISK-53(c) Manitoba Hydro indicated that the scenario requested is complex. The work required to analysis this scenario cannot be completed within the time frame of this hearing.

It should be noted that there are an unlimited number of development plans that could be analyzed in terms of market pricing scenarios and other factors. Manitoba Hydro's recommended development plan along with alternatives will be subject to a full examination when the "need for and alternatives to" process is initiated.

**Reference:** Revised IFF Pricing

Please provide the various 20-year IFF scenarios requested in PUB/MH/RISK-53 a) to d) using market pricing as follows:

- Current market prices to 2014/15.
- NSP/Xcel contract aggregated pricing from 2015/16 to 2025/26.
- Pending 500 MW WPS and 250 MW MP Contracts with aggregated NSP/Xcel pricing levels.
- Projected (no Carbon Adder) day-ahead market pricing for all opportunity exports and non-contract imports.
- d) In a modified IFF 09-1 without the pending WPS and MP contracts in-place and without Conawapa G.S. and Bipole III, but adding 1,000 MW of new CCCT thermal generation to supplement Keeyask G.S. (as per a modified PUB/MH-53(d).

#### **ANSWER:**

The work required to analyze the complex scenario defined in this information request cannot be completed within the time frame of this hearing.

It should be noted that there are an unlimited number of development plans that could be analyzed in terms of market pricing scenarios and other factors. Manitoba Hydro's recommended development plan along with alternatives will be subject to a full examination when the "need for and alternatives to" process is initiated.

**Reference:** Revised IFF Pricing

Please provide the various 20-year IFF scenarios requested in PUB/MH/RISK-53 a) to d) using market pricing as follows:

- Current market prices to 2014/15.
- NSP/Xcel contract aggregated pricing from 2015/16 to 2025/26.
- Pending 500 MW WPS and 250 MW MP Contracts with aggregated NSP/Xcel pricing levels.
- Projected (no Carbon Adder) day-ahead market pricing for all opportunity exports and non-contract imports.
- e) In the alternative to providing the above information requested, please provide an electronic spreadsheet with the confidential meta data removed.

#### **ANSWER:**

Please see the schedule provided in the response to PUB/MH/PRE-ASK-2. Manitoba Hydro is unable to provide a further breakdown of export prices due to the commercial sensitivity of the information.

**Reference:** Alternative Export Pricing Scenario

MH's response to PUB/MH-Risk-53 a) to d) suggests that the requested <u>alternate export</u> <u>pricing scenarios</u> are too time consuming in that they require a revisit of 2008 export pricing analyses.

Assuming this is the case, the PUB is prepared to stipulate, for sensitivity testing purposes, the following table on the progression of average annual export sale and average annual import or purchase prices to be employed in the preparation of the various IFF scenarios (Note: thermal generation quantities could also be priced at import levels to simplify the process).

- i. The Alternative IFF Scenarios to be defined are restated as follows:
- ii. MH's Recommended Development Plan.
- iii. MH's Alternative Development Sequence.
- iv. A Development Sequence without WPS/MP and Bipole III/Keeyask G.S./Conawapa G.S., but employing 1,000 MW of new CCCT generation staged and timed to meet domestic and NSP contract loads.

A Development Sequence without Bipole III and Conawapa G.S., but with Keeyask G.S. and 500 to 1,000 MW of new CCT generation sized and timed to meet domestic and NSP contract load.

For each of the above scenarios, employ export and import energy purchase prices as proposed by PUB:

Existing IFF's		g IFF's	Proposed Alternative IFF Prices		
Year	MH's IFF 09-1 Export Pricing (¢/KWh)	MH's Average Exports Low Price Scenario (¢/KWh)	Average Annual Prices for Exports ¢/KWh	Average Annual Prices for Imports (¢/KWh)	
2010/11	4.1		4.0	3.0	
2011/12	6.6	5.6	5.0	4.0	
2012/13	6.7	5.6	5.0	4.0	
2013/14	7.2	6.0	5.0	4.0	
2014/15	7.4	6.1	5.0	4.0	
2015/16	9.1	7.4	6.0	5.0	
2016/17	9.2	7.4	6.0	5.0	
2017/18	9.5	7.6	6.0	5.0	
2018/19	10.5	8.4	6.5	5.5	
2019/20	10.6	8.4	6.5	5.5	
2020/21	10.7	8.7	6.5	5.5	
2021/22	10.9	8.9	7.0	6.0	
2022/23	11.2	9.3	7.0	6.0	
2023/24	11.5	9.2	7.0	6.0	
2024/25	11.9	9.4	7.0	6.0	
2025/26	12.3	9.1	8.0	7.0	
2026/27	12.6	9.3	8.0	7.0	
2027/28	13.0	9.6	8.0	7.0	
2028/29	13.5	9.8	8.0	7.0	
2029/30		10.2	9.0	8.0	

## Note:

## **Proposed alternative prices for:**

- Exports assume both peak and off-peak.
- Imports assume both peak and off-peak as well as wind.

#### **ANSWER:**

Manitoba Hydro is not prepared to provide IFF scenarios based on the pricing assumptions outlined in the table above or provide the scenarios in (iii) and (iv) above as these additional complex analyses can not be completed within the timeframe of this hearing.

The low and high export price scenarios provided in Appendix 15 should provide an indication of the corporation's sensitivity to the lower and upper bounds of export prices on the Recommended Plan requested in (i). The alternative development sequence for IFF09 was also provided in Appendix 15. The scenarios for the Recommended Plan were updated for IFF10 assumptions and provided in PUB/MH/PRE-ASK-2.

It should be noted that there are an unlimited number of development plans that could be analyzed in terms of market pricing scenarios and other factors. Manitoba Hydro's recommended development plan along with alternatives will be subject to a full examination when the "need for and alternatives to" process is initiated.

**Reference:** Export Pricing Forecasts (Internal and External Process)

a) Please provide a summary of the external consultants' forecast electricity prices provided to MH as cited on an unnamed basis, in the ICF report.

#### **ANSWER:**

The specific details of Manitoba Hydro's electricity export price forecast, including details on specific pricing factors, are commercially sensitive information, and therefore are confidential since public release could harm the Corporation in negotiation of contracts for export sales.

As noted in the response to CAC/MSOS/MH II-41(a) and as described in the response PUB/MH I-156(a), Manitoba Hydro's electricity export price forecast is prepared using information from several external price forecast consultants who each have their own electricity price forecast models and assumptions. Manitoba Hydro has a consultant services agreement with each of the electricity export price forecast consultants, and the services agreement has confidentiality requirements that prevent Manitoba Hydro from publically releasing the forecast reports or specific information from the reports.

**Reference:** Export Pricing Forecasts (Internal and External Process)

- b) Please provide these 20-year forecasts for:
  - Contracted firm sales.
  - Opportunity peak sales.
  - Opportunity off-peak sales.

## **ANSWER**:

Please see the response to PUB/MH/PRE-ASK-5(a) which indicates that Manitoba Hydro is unable to publically release the external consultant forecast reports or specific information from the reports.

**Reference:** Export Pricing Forecasts (Internal and External Process)

c) Please provide the same summary data (as in "a" and "b") for the 2010 update of electricity price forecasts referred to in PUB/MH/RISK-56.

## **ANSWER:**

Please see the response to PUB/MH/PRE-ASK-5(a) which indicates that Manitoba Hydro is unable to publically release the external consultant forecast reports or specific information from the reports.

**Reference: Debt-Equity Calculations** 

a) Please confirm that the debt ratio shown in the 2009/10 Annual Report is derived as follows:

Debt (LT Debt Plus Notes Payable Minus Sinking Fund Investments)

Debt Ratio = Debt Plus Equity Plus Contributions in Aid of Construction

(Explain the rationale for each of the input parameters.)

#### **ANSWER:**

The debt ratio shown in the 2009/10 Annual Report is derived as follows:

Debt Ratio = Debt (LT Debt Plus Notes Payable Minus Sinking Fund Investments Minus Temporary Investments)

Debt Plus Equity (Retained Earnings Plus Accumulated Other Comprehensive Income Plus Contributions in Aid of Construction)

The Debt calculation is intended to represent the net debt of the Corporation and includes the total Long-term debt and Short-term debt (notes payable) net of Sinking Funds and Temporary Investments.

The Equity calculation includes those items listed as Equity on the Corporation's balance sheet (Retained Earnings and Accumulated Other Comprehensive Income) as well as non-refundable Contributions in Aid of Construction which represents capital contributions provided by customers towards service extension costs.

**Reference: Debt-Equity Calculations** 

b) Please confirm that the equity ratio shown in the 2008/09 Annual Report is derived as follows:

Equity (Retained Earnings Plus Contributions in Aid of Construction)

Equity Ratio = Equity Plus Debt (LT Debt and Notes Payable Minus Temporary Investments)

(Explain the rationale for each of the input parameters.)

#### **ANSWER:**

The equity ratio shown in the 2008/09 Annual Report is derived as follows:

Equity Ratio =	Equity (Retained Earnings Plus Contributions in Aid of Construction)
	Equity Plus Debt (LT Debt Plus Notes Payable Minus Sinking Fund Investments Minus Temporary Investments)

Please note that Accumulated Other Comprehensive Income ("AOCI") was excluded from the equity component of the equity ratio in the 2008/09 Annual Report. However, AOCI was included in the equity component of the equity ratio in the 2009/10 Annual Report due to changes in accounting standards as described in CAC/MSOS/MH I-116(b). For comparative purposes, the equity ratio for 2008/09 was restated in the 2009/10 Annual Report.

**Reference: Debt-Equity Calculations** 

## c) Please provide a detailed calculation of both ratios for comparison in:

Year	Debt Ratio	<b>Equity Ratio</b>
2007/08	X	X
2008/09	X	X
2009/10	X	X
2010/11	X	X
2011/12	X	X
2012/13	X	X

## **ANSWER:**

The attached table provides the calculations requested.

## **Debt-Equity Calculations** (\$ millions)

	A	В	C	D	E	$\mathbf{F}$	$\mathbf{G}$	( <b>D-E+F-G</b> )	(A+B+C)
			Accumulated					(A+B+C+D-E+F-G)	(A+B+C+D-E+F-G)
		Unamortized	Other		Sinking				
	Retained	Customer	Comprehensive	Long-Term	Fund	Short-Term	Short-Term	Consolidated	Consolidated
Year	Earnings	Contributions	Income	Debt	Investment	Debt	Investments	Debt Ratio	<b>Equity Ratio</b>
2007/08	1,822	300	305	7,571	718	-	133	0.73	0.27
2008/09	2,076	296	(169)	8,187	666	100	159	0.77	0.23
2009/10	2,239	295	285	8,538	822	-	174	0.73	0.27
2010/11	2,398	295	266	8,549	276	195	9	0.74	0.26
2011/12	2,531	294	266	9,126	347	201	14	0.74	0.26
2012/13	2,658	288	14	9,795	337	143	21	0.76	0.24

Ref A: As reported in the Financial Statistics of the 2010 Annual Report (page 100) and the IFF10 Consolidated Projected Balance Sheet (page 24).

Ref B: As reported in the Financial Statistics of the 2010 Annual Report (page 100) and the IFF10 Consolidated Projected Balance Sheet (page 24).

Ref C: As reported in the Financial Statistics of the 2010 Annual Report (page 100) and the IFF10 Consolidated Projected Balance Sheet (page 24).

Ref D: As calculated in the table below.

Ref E: As reported in the Financial Statistics of the 2010 Annual Report (page 100).

Ref F: Represents "Notes payable" as reported on the Balance Sheet in the 2010 Annual Report (page 71).

Ref G: Represents "Cash and cash equivalents" as reported on the Balance Sheet in the 2010 Annual Report (page 70).

The following table provides the calculation of long-term debt used in the aforementioned debt-equity calculations.

### (\$ millions)

	H	I	$\mathbf{D} = (\mathbf{H} + \mathbf{I})$	
	Long-Term	<b>Current Portion</b>	Long-Term	
Year	Debt	Long-Term Debt	Debt	
2007/08	7,218	353	7,571	
2008/09	7,668	519	8,187	
2009/10	8,228	310	8,538	
2010/11	8,524	25	8,549	
2011/12	8,944	182	9,126	
2012/13	8,966	829	9,795	

Ref H: As reported in the Financial Statistics of the 2010 Annual Report (page 100) and the IFF10 Consolidated Projected Balance Sheet (page 24).

Ref I: As reported on the Balance Sheet in the 2010 Annual Report (page 71).

**Reference:** Diversity Contracts – PUB/MH/RISK-67(b)

- a) Please confirm that in MH's 2009/10 Power Resource Plan:
  - i. Total imports include 258 GWh of 350 MW Diversity Agreement winter peak (7x4) energy purchases at day ahead market prices.
  - ii. Total exports include 258 GWh of 350 MW Diversity Agreement summer peak (7x4) energy sales.

#### **ANSWER:**

The representation of the NSP 350 MW Seasonal Diversity Sale Agreement in the 2009/10 Power Resource Plan was based on the initial Term Sheet that was agreed to on November 1, 2006. Since that time, negotiations were completed and on May 27, 2010 Xcel Energy executed Power Purchase Agreements (PPA) with Manitoba Hydro. The development of definitive agreements through the negotiation process has resulted in different terms and conditions for the Power Purchase Agreements. The following response is based on the 2010/11 Power Resource Plan which includes the final terms and conditions of the executed agreement.

- i. Based on the above comments, the statement in the information request cannot be confirmed for the 2009/10 Power Resource Plan. However, based on the executed agreements that are utilized in the 2010/11 Power Resource Plan, Manitoba Hydro has the option to purchase up to 1614 GWh of energy which corresponds to 350 MW for 7x24 hours during the six-month winter season. Manitoba Hydro cannot provide pricing information for this energy as it is trade secret and confidential.
- ii. Please refer to the response to PUB/MH/RISK-67(a) ii which provides the requested information. This response states that "Manitoba Hydro does not have a must supply commitment under the NSP 350 MW System Diversity Sale. Manitoba Hydro's commitment during the summer season under the NSP 350 MW System Diversity Sale is to offer 350 MW of energy on a daily basis for a minimum of four consecutive hours in which the MISO load is expected to peak (MH's Must Offer Energy). Manitoba Hydro will supply this energy to the extent that Manitoba Hydro's energy

offers clear the MISO day-ahead market." An export of 258 GW.h at the border is included in the 2010/11 Power Resource Plan for this diversity sale. An additional 10% is added to this export in order to consider losses in the Manitoba Hydro system from generation to the border. Consequently, 283 GW.h is utilized in the supply/demand tables in the 2010/11 Power Resource Plan.

**Reference:** Diversity Contracts – PUB/MH/RISK-67(b)

b) Please confirm that NSP maximum obligation to supply this energy in six winter months is predicated on and equal to MH's "Must Supply" obligation or MH's actual diversity supply in the prior six summer months.

#### **ANSWER:**

The assumption made in this information request is not confirmed. NSP/Xcel has the obligation to provide 350 MW of energy to Manitoba Hydro in all hours of the winter season if requested by Manitoba Hydro, which corresponds to 1614 GW.h as provided in the response to PUB/MH/PRE-ASK-7(a). This obligation is not affected by previous deliveries made by Manitoba Hydro.

**Reference:** Diversity Contracts – PUB/MH/RISK-67(b)

c) Please confirm that if MH supplied six months of 7x16 350 MW diversity summer energy (or a substantial portion thereof) to NSP, then NSP would under the "Adverse Water Energy" clause be obligated to supply an equal or greater amount of energy to MH (if MH provides notice by September 15) during the subsequent winter. If not, please clarify.

### **ANSWER**:

The assumption made in the information request is not confirmed. Please refer to the responses to PUB/MH/PRE-ASK-7(a) and (b) which indicate that NSP/Xcel has the obligation to provide 350 MW of energy in all hours of the winter season if requested by Manitoba Hydro. This obligation is not affected by deliveries made by Manitoba Hydro in the previous summer.

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**➢** \_\_\_ GWh (Total)

**Reference:** Diversity Contracts – PUB/MH/RISK-67(b)

d) Please provide a breakdown of MH's Power Resource Plan 2016/17 provisions for:

ı.	imports:
	GWh (NSP Diversity Purchases)
	GWh (Firm Purchases)
	GWh (Non-Firm Purchases)
	GWh (Total)
ii.	Exports:
	<b>GWh</b> (375/325 MW 5x16 Peak Sales)
	<b>&gt;</b> GWh (375/325 MW 2x16 Weekend Sales)
	➤ GWh (350 MW Diversity Sales)
	➤ GWh (Other)

#### **ANSWER**:

Please refer to the response to PUB/MH/PRE-ASK-7(a) for a clarification of the representation of the NSP 350 MW Seasonal Diversity Sale Agreement in the 2009/10 versus that in the 2010/11 Power Resource Plan. The following response is based on the 2010/11 Power Resource Plan which includes the final terms and conditions of the executed 2010 agreements. The import and export information for 2016/17 that is provided below is based on the dependable flow condition which includes the consideration of the adverse water provision.

#### i. Imports:

```
1614 GWh (NSP Diversity Import)0 GWh (Firm Imports)1100 GWh (Non-Contracted Import)
```

2714 GWh (Total Import)

## ii. Exports:

1584 GWh (375/325 MW Annual Export)

283 GWh (350 MW Diversity Export)

145 GWh (Other)

2012 GWh (Total Export without Adverse Water Declaration)

Less: (370) GWh (Adverse Water Right)

1642 GWh (Total Export with Adverse Water Declaration)

**Reference:** Diversity Contracts – PUB/MH/RISK-67(b)

e) Please explain why (how) 375 MW exports in the initial year of a drought could be limited to 5x16 summer sales as opposed to 7x16 sales under contract in advance of a September 15<sup>th</sup> notification date.

#### **ANSWER:**

During the weekdays (5x16 hours), Manitoba Hydro is obligated to deliver energy, either from its own resources or from the market under the contract. Manitoba Hydro has no obligation under normal conditions or under drought conditions to deliver energy on the weekend (2x16).

During each day of the contract term, Manitoba Hydro has an obligation to offer energy associated with the capacity levels for a minimum of four consecutive hours during which the MISO load is expected to peak.

**Reference:** Diversity Contracts – PUB/MH/RISK-67(b)

f) Please explain why 350 MW Diversity Sales would be expanded by NSP beyond a 4-hour daily peak in the summer months in advance of a MH declaration of a drought situation.

## **ANSWER**:

Regardless of water conditions, MH has no obligation and NSP has no right to increase the volume of energy offered daily by MH under the 350 MW Diversity contract above the four consecutive hours during which the MISO load is expected to peak.

Manitoba Hydro, on the other hand has the right but not the obligation on a daily basis to offer energy under the 350 MW Diversity contract for all hours.

**Reference:** Diversity Contracts – PUB/MH/RISK-67(b)

g) Please confirm that the NSP contracts would essentially preclude MH from other bilateral firm sales into MISO prior to Keeyask in service.

#### **ANSWER:**

Manitoba Hydro cannot confirm that the NSP contracts would preclude other bilateral firm sales prior to Keeyask in-service. The return energy provisions associated with the NSP sale are approximately equal to the energy obligations of the sale under adverse water conditions. Therefore, this sale is not expected to change the quantity of dependable energy that can be allocated to other bilateral firm sales.

Based on the 2010/11 Power Resource Plan recommended development plan, Manitoba Hydro has the following exportable dependable energy surplus during the time period when the NSP contracts are in effect and prior to Keeyask. This exportable surplus is available for long-term bilateral firm sales as follows:

Energy Sur	<u>plus - GW.h</u>
2015/16	1033
2016/17	664
2017/18	626
2018/19	341

Reference: 2002 to 2004 Drought

B.O. <u>101/04</u> #6 reads:

"MH file the following studies by no later than January 31, 2005.

(2<sup>nd</sup> bullet) A study of MH's Response to 2002-2004 drought, with recommendations by an outside and independent expert."

a) With respect to B.O. <u>101/04</u>, please provide a listing of documents already filed on the record of this proceeding, and cite the specific sections that go to answer the PUB's concerns about the 2002-04 drought situation.

### **ANSWER:**

In direct response to B.O. 101/04 #6 (2<sup>nd</sup> bullet), Manitoba Hydro filed the report, "Manitoba Hydro 2002-2004 Drought Risk Management Review," RiskAdvisory, 2005-01-18, May 3, 2005. The report was again filed for the 2008/09 General Rate Application, as Appendix 43, "Report on the 2002-2004 Drought." These materials were also referenced in Manitoba Hydro's letter of November 6, 2009 and circulated by email February 26, 2010. A hard copy was forwarded to all parties on March 4, 2010.

The report, "Independent Review of Manitoba Hydro Export Power Sales and Associated Risks," ICF International, 2009-09-11, evaluated the adequacy of Manitoba Hydro's drought risk mitigation measures which included context to the 2002-04 drought. This report was filed as Appendix 12.2 to this GRA.

The following responses filed in this proceeding related to 2002-04 drought.

PUB/MH II-85(a)

PUB/MH/RISK-74(d)

PUB/MH/RISK-126(e)

PUB/MH/RISK-127(a)

PUB/MH/RISK-133(b)

PUB/MH/RISK-133(c)

## MIPUG/MH/RISK-6(d) MIPUG/MH/RISK-6(e)

Manitoba Hydro can not fully respond to this question as the PUB has not made its specific concerns relating to the 2002-04 drought known to Manitoba Hydro.

2010 12 31 Page 2 of 2

Reference: 2002 to 2004 Drought

## B.O. <u>101/04</u> #6 reads:

"MH file the following studies by no later than January 31, 2005.

(2<sup>nd</sup> bullet) A study of MH's Response to 2002-2004 drought, with recommendations by an outside and independent expert."

b) Please provide any additional reports and/or internal memos that go to defining water supply situation and the financial consequences of the 2003/04 drought situation.

## **ANSWER**:

Manitoba Hydro has not produced additional reports on the 2003/04 drought.

**Reference: 2002 to 2004 Drought** 

## B.O. <u>101/04</u> #6 reads:

"MH file the following studies by no later than January 31, 2005.

(2<sup>nd</sup> bullet) A study of MH's Response to 2002-2004 drought, with recommendations by an outside and independent expert."

c) Please provide any specific correspondence and Board Order references that would indicate the PUB was since satisfied with MH's Response to B.O. <u>101/04</u> and no longer wished to examine the 2003/04 drought issue.

## **ANSWER**:

Manitoba Hydro is not aware of any such correspondence or Board Order reference.

**Reference: PUB/MH I-22** 

Please file an update to PUB/MH I-22 to incorporate 2010 actual and include 2011 and 2012 test years.

## **ANSWER:**

The following table updates PUB/MH I-22 to include information for 2010 actual and 2011 and 2012 test years. Please note the two test years are based on IFF10.

#### **Electric Operating Statistics**

		2005		2006		2007		2008	2	009	2	2010	:	2011	2012
(in millions of \$)	A	ctual	A	Actual	A	Actual	A	ctual	Ac	tual 1	A	ctual		Test	Test
Revenue															
Residential		386		387		410		437		462		476		501	526
General Service		553		597		613		638		665		669		693	739
Extraprovincial		554		827		592		625		622		427		444	461
Other		4		5		5		8		16		6		7	7
Total Revenue	\$	1,497	\$	1,816	\$	1,621	\$	1,707		1,765		1,578	\$	1,645	\$ 1,733
Expenses															
Operating, Maintenance and Administrative		299		311		323		323		364		378		398	402
Finance Expense		468		468		467		401		433		373		393	411
Depreciation and Amortization		289		301		311		324		340		358		374	405
Water Rentals and Assessments		112		131		112		124		123		121		120	115
Fuel and Power Purchased		135		125		226		135		176		104		121	187
Capital and Other Taxes		51		53		55		57		64		76		81	82
Corporate Allocation		6		6		7		8		8		8		9	9
Total Expenses		1,360		1,396		1,502		1,370		1,508		1,418		1,496	1,612
Non-controlling Interest <sup>2</sup>		-		-		-		-		-		-		-	4
Net Income	\$	137	\$	420	\$	120	\$	337	\$	257	\$	160	\$	149	\$ 125

<sup>&</sup>lt;sup>1</sup> 2008/09 Actuals have been restated to reflect the adoption of new accounting policies for Intangibles Assets and Dual Currency Bonds as described in Note 2 to the 2009/10 Financial Statements. Net Income is \$31 million lower as a result of the changes.

<sup>&</sup>lt;sup>2</sup> Non-controlling Interest represents NCN's share of the net (income) or loss from the Wuskwatim Power Limited Partnership (WPLP).

i Hydraulic Generation (GWh)	31,134	37,218	31,610	34,897	34,193	33,818	34,066	31,360
ii Thermal Generation (GWh)	414	401	522	457	335	143	80	89
iii Energy Purchases (GWh)	2,030	739	2,249	830	1,033	1,398	1,241	2,973
iv Export Sales to U.S. (GWh)	8,850	12,923	9,531	11,253	10,159	10,612	10,352	8,750
v Export Sales to Canada (GWh)	1,580	1,424	373	482	417	373	518	406
vi Export Losses (GWh)	751	1,219	855	986	893	928	948	832

**Reference:** PUB/MH I-28 (R) Financial Results: Income and Expenses

a) Please file an updated PUB/MH I-28 (R) (a) & (b) incorporating actual results for 2009/10 and the current view of forecast for 2010/11 based on the 2011-second quarter results.

## **ANSWER**:

The following table updates PUB/MH I-28(a)(R) to incorporate actual results for 2009/10 and the most current forecast information (IFF10) for 2010/11 and 2011/12.

MANITOBA HYDRO STATEMENT OF INCOME

Schedule 4.1.0 (000's)

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	20	2011/12
	Actual	Actual	Actual	Actual	Actual	Actual 2	Actual	Forecast	Fo	Forecast
Revenue										
General Consumers	918,231	938,954	983,653	1,023,613	1,074,581	1,126,812	1,144,891	1,194,396		1,264,254
Extraprovincial	350,994	553,727	826,766	592,245	624,971	622,646	426,641	443,630		461,017
Other	6,857	4,251	5,496	5,472	7,580	15,870	6,226	6,757		7,208
Total Revenue	\$ 1,276,082	\$ 1,496,933	\$ 1,815,915	\$ 1,621,330	\$ 1,707,132	\$ 1,765,328	\$ 1,577,758	\$ 1,644,783	↔	1,732,479
Expenses										
Operating, Maintenance and Administrative	283,356	298,613	310,659	323,466	322,697	364,287	377,551	397,695		401,870
Finance Expense	452,801	467,859	468,359	467,138	400,796	433,065	373,281	393,037		410,820
Depreciation and Amortization	274,325	289,291	301,213	310,913	323,573	340,314	358,179	374,438		405,099
Water Rentals and Assessments	71,455	111,521	131,020	112,497	123,767	123,000	121,033	120,554		115,107
Fuel and Power Purchased	568,897	135,456	124,841	226,212	134,887	176,383	103,974	120,923		187,163
Capital and Other Taxes	49,860	51,043	53,438	54,859	57,152	63,808	75,819	80,783		82,466
Corporate Allocation	3,693	6,457	6,470	6,661	7,576	7,554	8,019	8,832		9,286
Total Expenses	1,704,388	1,360,240	1,396,000	1,501,746	1,370,449	1,508,410	1,417,856	1,496,262		1,611,811
Non-controlling Interest 3	ı	ı			•					4,278
Net Income	\$ (428,306)	\$ 136,692	\$ 419,915	\$ 119,584	\$ 336,683	\$ 256,918	\$ 159,902	\$ 148,521	\$	124,946

<sup>&</sup>lt;sup>1</sup> General Consumers Revenue - reflects an interim 2.8% increase in 2010/11 and proposed 2.9% increase in 2011/12

<sup>&</sup>lt;sup>2</sup> 2008/09 Actuals have been restated to reflect the adoption of new accounting policies for Intangibles Assets and Dual Currency Bonds as described in Note 2 to the 2009/10 Financial Statements. Net Income is \$31 million lower as a result of the changes.

<sup>&</sup>lt;sup>3</sup> Non-controlling Interest represents NCN's share of the net (income) or loss from the Wuskwatim Power Limited Partnership (WPLP).

**Reference:** PUB/MH I-28 (R) Financial Results: Income and Expenses

b) With respect to PUB/MH I-28(b), please provide the Compounded Annual Growth for the years 2004/05 through 2009/10 and 2009/10 through 2011/12.

## **ANSWER:**

The following table updates PUB/MH I-28(b) to incorporate actual results for 2009/10 and the most current forecast information (IFF10) for 2010/11 and 2011/12. The Compounded Annual Growth values reflect the updated information.

	2004/05 A ctual	2005/06 Actual	2006/07 Actual	2007/08 Actual	2008/09 Actual <sup>2</sup>	2009/10 Actual	Compounded Annual Growth
Revenue							
General Consumers <sup>1</sup>	938,954	983,653	1,023,613	1,074,581	1,126,812	1,144,891	4.0
Extraprovincial	553,727	826,766	592,245	624,971	622,646	426,641	-5.1
Other	4,251	5,496	5,472	7,580	15,870	6,226	7.9
Total Revenue	\$1,496,933	\$1,815,915	\$1,621,330		\$1,765,328	\$1,577,758	1.1
Expenses							
Operating, Maintenance and Administrative	298,613	310,659	323,466	322,697	364,287	377,551	4.8
Finance Expense	467,859	468,359	467,138	400,796	433,065	373,281	-4.4
Depreciation and Amortization	289,291	301,213	310,913	323,573	340,314	358,179	4.4
Water Rentals and Assessments	111,521	131,020	112,497	123,767	123,000	121,033	1.7
Fuel and Power Purchased	135,456	124,841	226,212	134,887	176,383	103,974	-5.2
Capital and Other Taxes	51,043	53,438	54,859	57,152	63,808	75,819	8.2
Corporate Allocation	6,457	6,470	6,661	7,576	7,554	8,019	4.4
Total Expenses	1,360,240	1,396,000	1,501,746	1,370,449	1,508,410	1,417,856	0.8
Non-controlling Interest <sup>3</sup>							
Net Income	\$ 136,692	\$ 419,915	\$ 119,584	\$ 336,683	\$ 256,918	\$ 159,902	3.2
	2009/10 A ctual	2010/11 Forecast	2011/12 Forecast	Compounded Annual Growth	1		
Revenue							
General Consumers <sup>1</sup>	1,144,891	1,194,396	1,264,254	5.1			
Extraprovincial	426,641	443,630	461,017	4.0			
Other	6,226	6,757	7,208	7.6			
Total Revenue	\$1,577,758	\$1,644,783	\$1,732,479	4.8			
Expenses							
Operating, Maintenance and Administrative	377,551	397,695	401,870	3.2			
Finance Expense	373,281	393,037	410,820	4.9			
Depreciation and Amortization	358,179	374,438	405,099	6.3			
Water Rentals and Assessments	121,033	120,554	115,107	-2.5			
Fuel and Power Purchased	103,974	120,923	187,163	34.2			
Capital and Other Taxes	75,819	80,783	82,466	4.3			
Corporate Allocation	8,019	8,832	9,286	7.6			
Total Expenses	1,417,856	1,496,262	1,611,811	6.6			
Non-controlling Interest <sup>3</sup>	-	-	4,278	n/a			
Net Income	\$ 159,902	\$ 148,522	\$ 124,946	-11.6			

<sup>&</sup>lt;sup>1</sup> General Consumers Revenue - reflects an interim 2.8% increase in 2010/11 and proposed 2.9% increase in 2011/12

<sup>&</sup>lt;sup>2</sup> 2008/09 Actuals have been restated to reflect the adoption of new accounting policies for Intangibles Assets and Dual Currency Bonds as described in Note 2 to the 2009/10 Financial Statements. Net Income is \$31 million lower as a result of the changes.

 $<sup>^3</sup>$  Non-controlling Interest represents NCN's share of the net (income) or loss from the Wuskwatim Power Limited Partnership (WPLP).

Reference: PUB/MH I-36 (a) & (b) Finance Expense

a) Please extend PUB/MH I -36 (a) to provide the detail of finance expense incorporating each year in the 20 year IFF09 and IFF10 if available.

## **ANSWER:**

Please see the attached schedule.

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PUB/ MH Pre-Ask 11 a)								IFF09 Forec	ast
	2003/04 Actual	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08 Actual	2008/09 Actual	2009/10 Forecast	2010/11 Forecast	2011/12 Forecast
Interest on Short & Long-Term Debt									
Gross Interest	\$ 489,978	\$ 485,696	\$ 492,656	\$ 496,204	\$ 500,512	\$ 468,685	\$ 475,783	\$ 492,011	\$ 553,011
Provincial Guarantee Fee	66,844	67,801	65,905	67,997	69,865	70,360	72,274	78,099	82,920
Amortization of (Premiums), Discounts, and Transaction Costs	(14,375)	(9,326)	(8,802)	(8,658)	(11,054)	(11,605)	(10,498)	2,321	2,276
Intercompany Interest Receivable	(15,259)	(15,392)	(16,470)	(16,827)	(19,774)	(18,182)	(16,380)	(19,416)	(25,015)
Total Interest on Short & Long-Term Debt	527,188	528,778	533,289	538,716	539,549	509,259	521,179	553,015	613,192
Interest Earned on Sinking Fund	(43,028)	(27,656)	(30,640)	(28,535)	(30,180)	(24,920)	(24,908)	(17,585)	(10,720)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	=.	-	=	=.	(52,407)	(11,359)	8,011	4,398	=
Interest Allocated to Construction	(31,564)	(32,683)	(34,496)	(47,071)	(60,015)	(74,493)	(91,267)	(130,789)	(137,126)
Corporate Allocation	(16,830)	(16,763)	(16,809)	(17,141)	(17,483)	(17,543)	(17,880)	(18,704)	(18,704)
Other Amortization	17,035	16,166	17,015	21,170	21,331	20,116	21,776	22,204	21,008
<b>Total Finance Expense</b>	\$ 452,801	\$ 467,843	\$ 468,359	\$ 467,139	\$ 400,796	\$ 401,060	\$ 416,913	\$ 412,539	\$ 467,650

MANITOBA HYDRO FINANCE EXPENSE (in \$ '000) PUB/ MH Pre-Ask 11 a)

	2012/13 Forecast	2013/14 Forecast	2014/15 Forecast	2015/16 Forecast	2016/17 Forecast	2017/18 Forecast	2018/19 Forecast	2019/20 Forecast	2020/21 Forecast
Interest on Short & Long-Term Debt	e 500.212	£ 625.404	£ 604.621	£ 776547	¢ 070 124	¢ 061,000	¢1.011.051	61 120 051	¢1 146 567
Gross Interest Provincial Guarantee Fee	\$ 580,312 89,272	\$ 625,404 93,497	\$ 684,621 100,738	\$ 776,547 113,909	\$ 878,124 130,548	\$ 961,998 146,572	\$1,011,851 158,904	\$1,138,951 165,583	\$1,146,567 172,104
Amortization of (Premiums), Discounts, and Transaction Costs	2,414	2,273	1,954	2,525	2,758	3,020	3,205	3,134	3,243
Intercompany Interest Receivable	(26,700)	(27,296)	(27,932)	(28,247)	(28,434)	(28,522)	(28,396)	(28,119)	(27,868)
Total Interest on Short & Long-Term Debt	645,298	693,878	759,381	864,734	982,996	1,083,068	1,145,564	1,279,549	1,294,046
Interest Earned on Sinking Fund	(11,980)	(10,794)	(1,382)	(12,448)	(23,251)	(37,002)	(39,907)	(35,627)	(34,435)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	(95)	(14,049)	(7,228)	(18,352)	(7,390)	(10,814)	(2,656)	(772)	(514)
Interest Allocated to Construction	(110,061)	(144,108)	(208, 376)	(306,070)	(408,036)	(449,275)	(430,042)	(365,023)	(300,298)
Corporate Allocation	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)
Other Amortization	20,819	20,463	20,282	20,067	19,820	19,597	19,361	18,491	18,228
Total Finance Expense	\$ 525,277	\$ 526,686	\$ 543,973	\$ 529,227	\$ 545,435	\$ 586,870	\$ 673,616	\$ 877,914	\$ 958,323

MANITOBA HYDRO FINANCE EXPENSE (in \$ '000) PUB/ MH Pre-Ask 11 a)

	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast	2025/26 Forecast	2026/27 Forecast	2027/28 Forecast	2028/29 Forecast
Interest on Short & Long-Term Debt								
Gross Interest	\$1,087,057	\$1,088,330	\$1,093,621	\$1,071,720	\$1,037,110	\$ 993,398	\$ 953,043	\$ 908,505
Provincial Guarantee Fee	179,408	177,223	182,594	182,351	182,300	179,260	179,242	179,181
Amortization of (Premiums), Discounts, and Transaction Costs	2,924	1,871	1,890	2,033	2,036	1,721	1,851	1,995
Intercompany Interest Receivable	(29,386)	(29,185)	(28,920)	(28,479)	(27,825)	(27,008)	(25,915)	(24,605)
Total Interest on Short & Long-Term Debt	1,240,003	1,238,239	1,249,185	1,227,625	1,193,621	1,147,371	1,108,221	1,065,076
Interest Earned on Sinking Fund	(34,180)	(16,129)	(17,355)	(29,287)	(36,413)	(34,124)	(46,348)	(58,581)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	(930)	(1,350)	2	-	-	2	-	-
Interest Allocated to Construction	(352,971)	(329,902)	(159,756)	(30,714)	(29,672)	(17,854)	(22,687)	(24,875)
Corporate Allocation	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)	(18,704)
Other Amortization	17,935	17,701	17,550	17,395	17,256	17,117	16,984	16,844
Total Finance Expense	\$ 851,153	\$ 889,855	\$1,070,922	\$1,166,315	\$1,126,088	\$1,093,808	\$1,037,466	\$ 979,760

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PUB/ MH Pre-Ask 11 a)								IFF10 Forec	ast
						Restated			
	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
	Actual	Forecast	Forecast						
Interest on Short & Long-Term Debt (Note 1)									
Gross Interest	\$ 489,978	\$ 485,696	\$ 492,656	\$ 496,204	\$ 500,512	\$ 501,406	\$ 441,097	\$ 471,877	\$ 506,607
Provincial Guarantee Fee	66,844	67,801	65,905	67,997	69,865	70,360	72,274	76,694	83,816
Amortization of (Premiums), Discounts, and Transaction Costs	(14,375)	(9,326)	(8,802)	(8,658)	(11,054)	(12,322)	(11,262)	1,864	1,675
Intercompany Interest Receivable	(15,259)	(15,392)	(16,470)	(16,827)	(19,774)	(18,182)	(15,737)	(17,406)	(21,198)
Total Interest on Short & Long-Term Debt	527,188	528,778	533,289	538,716	539,549	541,262	486,371	533,029	570,900
Interest Earned on Sinking Fund	(43,028)	(27,656)	(30,640)	(28,535)	(30,180)	(24,920)	(23,702)	(15,329)	(10,981)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	-	-	-	=	(52,407)	(11,359)	6,249	1,303	=
Interest Allocated to Construction	(31,564)	(32,683)	(34,496)	(47,071)	(60,015)	(74,493)	(98,121)	(132,015)	(151,346)
Corporate Allocation	(16,830)	(16,763)	(16,809)	(17,141)	(17,483)	(17,543)	(17,896)	(19,052)	(19,128)
Other Amortization	17,035	16,166	17,015	21,170	21,331	20,116	20,365	25,104	21,374
Total Finance Expense	\$ 452,801	\$ 467,843	\$ 468,359	\$ 467,139	\$ 400,796	\$ 433,063	\$ 373,267	\$ 393,040	\$ 410,819

Note 1: In accordance with the accounting change for dual currency bonds, that was implemented in 2009/10, the 2008/09 comparative actuals were restated.

#### MANITOBA HYDRO FINANCE EXPENSE (in \$ '000) PUB/ MH Pre-Ask 11 a)

	2012/13 Forecast	2013/14 Forecast	2014/15 Forecast	2015/16 Forecast	2016/17 Forecast	2017/18 Forecast	2018/19 Forecast	2019/20 Forecast
Interest on Short & Long-Term Debt								
Gross Interest	\$ 545,940	\$ 593,259	\$ 657,202	\$ 744,545	\$ 832,375	\$ 915,341	\$ 994,808	\$1,104,445
Provincial Guarantee Fee	89,480	95,538	101,720	113,970	129,150	141,945	158,664	171,757
Amortization of (Premiums), Discounts, and Transaction Costs	1,768	1,559	1,205	1,732	1,927	2,151	2,295	2,181
Intercompany Interest Receivable	(15,987)	(17,030)	(18,718)	(19,690)	(20,477)	(20,237)	(19,657)	(19,012)
Total Interest on Short & Long-Term Debt	621,201	673,326	741,409	840,557	942,975	1,039,200	1,136,110	1,259,371
Interest Earned on Sinking Fund	(12,492)	(9,470)	877	(10,195)	(22,244)	(35,986)	(39,902)	(34,933)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	-	(23,110)	(12,818)	(18,810)	(11,188)	(17,084)	(7,728)	(6,562)
Interest Allocated to Construction	(137,525)	(186,214)	(208,954)	(267,719)	(370,026)	(421,301)	(453,381)	(514,835)
Corporate Allocation	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)
Other Amortization	20,982	20,068	19,820	19,555	19,259	18,983	18,692	17,735
Total Finance Expense	\$ 473,038	\$ 455,472	\$ 521,206	\$ 544,260	\$ 539,648	\$ 564,684	\$ 634,663	\$ 701,648

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Reference: PUB/MH I-36 (a) & (b) Finance Expense

b) Please provide the same analysis as in PUB/MH I-36 (b) providing a comparison between 2009/10 forecast and actual and if changed 2010/11 forecast vs updated forecast.

## **ANSWER:**

Please see the attached schedule.

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#### PUB/MH Pre-Ask 11 b)

#### MANITOBA HYDRO FINANCE EXPENSE

(\$'000s)

(\$ 0003)			2009/10 Forecast		2009/10 Actual	2009/10 Variance	2010/11 Forecast IFF09		2010/11 Forecast	2010/11 Variance
			As Filed				As Filed			
			chedule 4.6.0				Schedule 4.6.0			
		2	010/11 GRA	20	010/11 GRA		2010/11 GRA	IF	F10 Update	
			(A)		(B)	(A - B)	 (C)		(D)	(C - D)
	Interest on Short & Long-Term Debt									
Note 1	Gross Interest	\$	475,783	\$	441,097	\$ 34,686	\$ 492,011	\$	471,877	\$ 20,134
Note 2	Provincial Guarantee Fee		72,274		72,274	0	78,099		76,694	1,405
Note 3	Amortization of (Premiums), Discounts, and Transaction Costs		(10,498)		(11,262)	764	2,321		1,864	457
Note 4	Intercompany Interest Receivable		(16,380)		(15,737)	(643)	 (19,416)		(17,406)	 (2,010)
	Total Interest on Short & Long-Term Debt		521,179		486,371	34,808	553,015		533,029	19,986
Note 5	Interest Earned on Sinking Fund		(24,908)		(23,702)	(1,206)	(17,585)		(15,329)	(2,256)
Note 6	Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges		8,011		6,249	1,762	4,398		1,303	3,095
Note 7	Interest Allocated to Construction		(91,267)		(98,121)	6,854	(130,789)		(132,015)	1,226
Note 8	Corporate Allocation		(17,880)		(17,896)	16	(18,704)		(19,052)	348
Note 9	Other Amortization		21,776		20,365	1,411	 22,204		25,104	 (2,900)
	Total Finance Expense	\$	416,913	\$	373,267	\$ 43,646	\$ 412,539	\$	393,040	\$ 19,499

Note 1: \*For 2009/10, the lower actuals is primarily due to accounting for changes in carrying values of dual currency bonds.

\* For 2010/11, the lower IFF10 forecast is primarily due to lower LTD interest rates, lower USD/CAD, and interest income from St.Joseph Wind Farm which was not included in the IFF09 forecast.

Note 2: \* For 2010/11, the lower IFF10 forecast is primarily due to lower forecasted USD/CAD rate.

Note 3: \* For 2009/10, the variance is primarily due to write-off of unamortized commissions on dual currency bonds.

\* For 2010/11, the variance is primarily due to actual long term debt being issued at premium.

Note 4: \* For both 2009/10 and 2010/11, the variances are primarily due to lower STD balances, and matured CG long term debt being refinanced at a lower rate.

Note 5: \* For 2009/10, the lower actuals is primarily due to lower volume of sinking fund assets and lower interest rates earned on sinking fund.

\* For 2010/11, the lower IFF10 forecast is primarily due to lower interest rates earned on sinking fund.

Note 6: \* For both 2009/10 and 2010/11, the variances are primarily due to lower USD/CAD rates.

Note 7: \*For both 2009/10 and 2010/11, the variances are primarily due to a higher volume of construction work in progress.

Note 8: \* For 2010/11, the variance is primarily due to maturing Centra acquisition long term debt being refinanced at a higher rate.

Note 9: \* For 2009/10, the variances are primarily due to lower actual payment for deferred mitigation liabilities.

\* For 2010/11, the variances are primarily due to higher projected deferred mitigation liabilities.

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## PUB/MH/PRE-ASK-12 (REVISED)

**Reference: PUB/MH I-32 (b) (c), (d)- OM&A** 

a) Please refile the response to PUB/MH I-32 (b) incorporating actual results for electric operations for 2009/10. With respect to (c) provide the Compounded Annual Growth for the years 2004/05 through 2009/10 and 2009/10 through 2011/12.

## **ANSWER**:

The following schedule updates PUB/MH I-32(b) to incorporate actual results for 2009/10. Please note that 2008/09 has also been restated to reflect changes in accounting standards for intangible assets. In addition, IFF10 OM&A targets have been adjusted to reflect the provision for accounting changes.

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## MANITOBA HYDRO OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY BUSINESS UNIT

Schedule 4.5.3 (000's)

		2004/05 Actual		2005/06 Actual		2006/07 Actual		2007/08 Actual		2008/09 Actual		2009/10 Actual		2010/11 Forecast		2011/12 Forecast
President & CEO		Actual		Actual	_	Actual	_	Actual		Actual		Actual		orecast	r	orecast
General Counsel	\$	4,383	\$	5,175	\$	4,886	\$	4,629	\$	5,669	\$	5,933	\$	5,545	\$	5,673
Public Affairs	Ψ	2,804	Ψ	2,856	Ψ	3,288	Ψ	2,939	Ψ	3,189	Ψ	3,582	Ψ	3,352	Ψ	3,429
Research & Development		3,491		3,462		3,491		3,548		3,396		4,148		4,395		4,496
Administration		8,575		8,978		9,897		9,861		9,901		14,468		12,137		12,416
	\$	19,253	\$	20,471	\$	21,562	\$	20,977	\$	22,155	\$	28,131	\$	25,429	\$	26,014
Corporate Relations																
Aboriginal Relations	\$	2,968	\$	4,652	\$	4,324	\$	4,331	\$	4,473	\$	3,929	\$	4,448	\$	4,550
Administration		535		844		896		914		1,047		769		752		769
	\$	3,503	\$	5,496	\$	5,220	\$	5,245	\$	5,520	\$	4,698	\$	5,200	\$	5,320
Corporate Planning & Strategic Analysis																
Corporate Strategic Review	\$	532	\$	559	\$	581	\$	582	\$	626	\$	863	\$	2,658	\$	2,719
Corporate Planning & Development		777		836		924		1,042		1,342		1,584		2,592		2,652
Administration		387		257		362		362		380		999		1,050		1,074
	\$	1,696	\$	1,652	\$	1,867	\$	1,986	\$	2,348	\$	3,446	\$	6,300	\$	6,445
Finance & Administration																
Information Technology Services	\$	29,273	\$	29,883	\$	34,414	\$	32,709	\$	34,478	\$	35,349	\$	35,500	\$	36,317
Treasury		2,266		2,146		1,887		2,001		2,067		1,957		2,100		2,148
Corporate Risk Management		150		153		442		460		566		593		836		855
Gas Supply		1,789		2,027		1,981		2,058		2,311		2,356		2,300		2,353
Rates & Regulatory Affairs		3,105		2,913		3,037		2,998		2,918		3,388		3,741		3,827
Corporate Controller		9,085		9,161		8,800		9,475		10,053		11,327		11,626		11,893
Human Resources		10,797		10,840		11,220		11,084		10,666		10,021		10,915		11,166
Corporate Safety & Health		2,819		3,020		2,957		3,411		3,663		3,524		3,750		3,836
Corporate Services		29,836		31,216		31,952		33,117		35,279		37,253		36,644		37,487
Administration		1,160		1,294		1,680		1,820		1,901		2,673		2,555		2,614
	\$	90,280	\$	92,653	\$	98,370	\$	99,133	\$	103,902	\$	108,441	\$	109,967	\$	112,496
Power Supply																
Power Planning	\$	2,431	\$	1,836	\$	2,299	\$	2,955	\$	5,634	\$	5,657	\$	6,494	\$	6,643
Power Projects Development		865		624		754		411		1,276		376		396		405
HVDC		17,653		17,282		19,177		19,128		21,659		23,170		23,096		23,627
Generation North		28,942		29,516		29,399		30,929		33,671		29,594		28,942		29,608
Generation South		44,754		43,734		45,105		46,747		50,020		54,332		52,437		53,643
Power Sales & Operations		8,870		10,120		11,346		11,625		12,578		12,969		13,290		13,596
Engineering Services		5,784		4,488		4,449		4,909		4,534		4,693		5,171		5,290
New Generation Construction		(134)		(306)		(447)		(228)		24		(212)		(249)		(255)
Administration		4,268	_	9,902	_	11,277		11,134	_	14,952	_	16,495	_	18,523		18,949
		113,433	\$	117,196	\$	123,359	\$	127,610	\$	144,348	\$	147,074	\$	148,100	\$	151,506

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		2004/05 Actual		2005/06 Actual		2006/07 Actual		2007/08 Actual		2008/09 Actual		2009/10 Actual		2010/11 Forecast		2011/12 Forecast
Transmission																
Transmission System Operations	\$	27,102	\$	27,638	\$	29,779		28,453		31,408		33,185		33,545		34,317
Transmission Planning & Design		4,835		4,854		5,212		3,403		5,219		4,161		4,660		4,767
Transmission Construction & Line Maintenance		14,349		14,396		14,862		15,952		15,964		17,219		16,661		17,044
Apparatus Maintenance		28,913		29,082		31,327		33,834		36,281		35,742		35,579		36,397
Administration		2,779		1,840		2,323		1,529		2,216		1,995		1,955		2,000
	\$	77,978	\$	77,810	\$	83,503	\$	83,171	\$	91,088	\$	92,302	\$	92,400	\$	94,525
Customer Services & Distribution																
Customer Service Operations - Winnipeg & North	\$	43,748	\$	44,302	\$	42,044		44,893		48,121		49,635		48,808		49,931
Customer Service Operations - South		39,498		44,036		42,811		43,951		46,243		50,368		49,439		50,576
Distribution Planning & Design		6,608		7,378		7,157		8,075		8,541		7,718		8,555		8,752
Distribution Construction		2,253		688		(198)		910		694		2,216		942		964
Administration		-		560		277		544		163		1,130		1,256		1,285
	\$	92,107	\$	96,964	\$	92,091	\$	98,373	\$	103,762	\$	111,067	\$	109,000	\$	111,507
Customer Care & Marketing																
Industrial & Commercial Solutions	\$	2,780	\$	1,946	\$	2,449	\$	2,669	\$	2,086	\$	2,636	\$	3,293	\$	3,369
Consumer Marketing & Sales		9,115		9,104		9,346		8,264		8,904		10,019		10,341		10,579
Business Support Services		25,448		26,929		26,661		22,937		23,128		23,347		23,622		24,165
Administration	Φ.	5,357	Φ.	4,676	Φ.	4,869	4	4,989	Φ.	6,377		6,865	Φ.	5,744	Φ.	5,876
	\$	42,700	\$	42,655	\$	43,325	\$	38,859	\$	40,495	\$	42,867	\$	43,000	\$	43,989
Motor Vehicle Chargeout		(14,311)		(13,984)		(15,065)		(15,394)		(16,043)		(16,019)		(16,601)		(16,983)
Payroll Tax		(7,602)		(8,136)		(8,344)		(8,774)		(9,679)		(10,070)		(10,070)		(10,272)
Corporate Allocations & Adjustments		(7,018)		(7,006)		(7,031)		(4,930)		(3,824)		(13,284)		(7,609)		(8,730)
CICA Accounting Changes*		-		-		-		-		5,000		9,000		9,000		9,000
Provision for Accounting Changes		-		-		-		-		-		-		18,000		13,500
Operating & Administration Charged to Centra		(55,232)		(53,085)		(53,505)		(56,270)		(59,042)		(60,951)		(63,400)		(64,000)
Capitalized Overhead		(58,174)		(62,028)		(61,887)		(67,289)		(65,743)		(69,151)		(71,021)		(72,447)
Operating & Administrative Costs Attributable to E	Operating & Administrative Costs Attributable to Ele \$ 298,613															

<sup>\*</sup> Other CICA Accounting Changes totalling \$4.6 million in 2008/09 and \$4.0 million in 2009/10 & future years are embedded within the Total Costs

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## MANITOBA HYDRO OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY BUSINESS UNIT

OPERATING, MAINTENANCE AND ADMINISTRATIVE C	OSTS BY BUS	SINESS U	NIT							Fiscal 2004/05-2009/10				(000's)	Fiscal 2009/10-2011/12
		2004/05		2005/06	2006/07	2007/08	2008/09	- 2	2009/10	Compounded		2010/11		011/12	Compounded
		Actual		Actual	 Actual	 Actual	 Actual		Actual	Annual Growth	F	orecast	F	orecast	<b>Annual Growth</b>
President & CEO															
General Counsel	\$	4,383	\$	5,175	\$ 4,886	\$ 4,629	\$ 5,669	\$	5,933	6.2	\$	5,545	\$	5,673	(2.2)
Public Affairs		2,804		2,856	3,288	2,939	3,189		3,582	5.0		3,352		3,429	(2.2)
Research & Development		3,491		3,462	3,491	3,548	3,396		4,148	3.5		4,395		4,496	4.1
Administration		8,575		8,978	 9,897	 9,861	 9,901		14,468	11.0		12,137		12,416	(7.4)
	\$	19,253	\$	20,471	\$ 21,562	\$ 20,977	\$ 22,155	\$	28,131	7.9	\$	25,429	\$	26,014	(3.8)
Corporate Relations															
Aboriginal Relations	\$	2,968	\$	4,652	\$ 4,324	\$ 4,331	\$ 4,473	\$	3,929	5.8	\$	4,448	\$	4,550	7.6
Administration		535		844	 896	 914	 1,047		769	7.5		752		769	0.0
	\$	3,503	\$	5,496	\$ 5,220	\$ 5,245	\$ 5,520	\$	4,698	6.0	\$	5,200	\$	5,320	6.4
Corporate Planning & Strategic Analysis															
Corporate Strategic Review	\$	532	\$	559	\$ 581	\$ 582	\$ 626	\$	863	10.2	\$	2,658	\$	2,719	77.5
Corporate Planning & Development		777		836	924	1,042	1,342		1,584	15.3		2,592		2,652	29.4
Administration		387		257	362	362	380		999	20.9		1,050		1,074	3.7
	\$	1,696	\$	1,652	\$ 1,867	\$ 1,986	\$ 2,348	\$	3,446	15.2	\$	6,300	\$	6,445	36.8
Finance & Administration	·														
Information Technology Services	\$	29,273	\$	29,883	\$ 34,414	\$ 32,709	\$ 34,478	\$	35,349	3.8	\$	35,500	\$	36,317	1.4
Treasury		2,266		2,146	1,887	2,001	2,067		1,957	(2.9)		2,100		2,148	4.8
Corporate Risk Management		150		153	442	460	566		593	31.6		836		855	20.1
Gas Supply		1,789		2,027	1,981	2,058	2,311		2,356	5.7		2,300		2,353	(0.1)
Rates & Regulatory Affairs		3,105		2,913	3,037	2,998	2,918		3,388	1.8		3,741		3,827	6.3
Corporate Controller		9,085		9,161	8,800	9,475	10,053		11,327	4.5		11,626		11,893	2.5
Human Resources		10,797		10,840	11,220	11,084	10,666		10,021	(1.5)		10,915		11,166	5.6
Corporate Safety & Health		2,819		3,020	2,957	3,411	3,663		3,524	4.6		3,750		3,836	4.3
Corporate Services		29,836		31,216	31,952	33,117	35,279		37,253	4.5		36,644		37,487	0.3
Administration		1,160		1,294	1,680	1,820	1,901		2,673	18.2		2,555		2,614	(1.1)
	\$	90,280	\$	92,653	\$ 98,370	\$ 99,133	\$ 103,902	\$	108,441	3.7	\$	109,967	\$	112,496	1.9
Power Supply															
Power Planning	\$	2,431	\$	1,836	\$ 2,299	\$ 2,955	\$ 5,634	\$	5,657	18.4	\$	6,494	\$	6,643	8.4
Power Projects Development		865		624	754	411	1,276		376	(15.3)		396		405	3.8
HVDC		17,653		17,282	19,177	19,128	21,659		23,170	5.6		23,096		23,627	1.0
Generation North		28,942		29,516	29,399	30,929	33,671		29,594	0.4		28,942		29,608	0.0
Generation South		44,754		43,734	45,105	46,747	50,020		54,332	4.0		52,437		53,643	(0.6)
Power Sales & Operations		8,870		10,120	11,346	11,625	12,578		12,969	7.9		13,290		13,596	2.4
Engineering Services		5,784		4,488	4,449	4,909	4,534		4,693	(4.1)		5,171		5,290	6.2
New Generation Construction		(134)		(306)	(447)	(228)	24		(212)	9.6		(249)		(255)	9.6
Administration		4,268		9,902	11,277	11,134	14,952		16,495	31.0		18,523		18,949	7.2
	\$	113,433	\$	117,196	\$ 123,359	\$ 127,610	\$ 144,348	\$	147,074	5.3	\$	148,100	\$	151,506	1.5

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2004/05 2005/06 2006/07 2007/08 2008/09 2009/10 Compounded 2010/11 2011/12 Compounde									Fiscal					Fiscal
President		 2004/05	2005/06	- 2	2006/07	2007/08	2008/09	2009/10		- 2	2010/11	20	11/12	2009/10-2011/12 Compounded
Paramission System Operations		 Actual	Actual		Actual	Actual	 Actual	 Actual		F	Forecast	Fo	recast	Annual Growth
Transmission Planning & Design	Transmission													
Paramission Construction & Line Maintenance	Transmission System Operations	\$ 27,102	\$ 27,638	\$	29,779	28,453	31,408	33,185	4.1		33,545		34,317	1.7
Administration	Transmission Planning & Design	4,835	4,854		5,212	3,403	5,219	4,161	(3.0)		4,660		4,767	7.0
Administration   2,779   1,840   2,323   1,529   2,216   1,995   6,40   1,955   2,000   0,1	Transmission Construction & Line Maintenance	14,349	14,396		14,862	15,952	15,964	17,219	3.7		16,661		17,044	(0.5)
Customer Services & Distribution         \$77,978         \$77,810         \$83,503         \$83,171         \$91,088         \$92,302         3.4         \$92,400         \$94,525         1.2           Customer Service Operations - Winnipge & North         \$43,748         \$44,302         \$42,044         44,893         48,121         49,635         2.6         48,808         49,931         0.3           Customer Service Operations - South         39,498         44,036         42,811         43,951         46,243         50,368         5.0         49,439         50,576         0.2           Distribution Construction         2,253         688         (198)         910         694         2,216         0.3         942         994         (34,1)           Administration         92,107         560         277         544         163         1,130         12,556         1,285         6.6           Customer Care & Marketing         92,107         99,064         92,017         89,373         803,762         111,007         3.8         109,000         9111,507         0.2           Customer Care & Marketing         101         92,107         99,004         9,249         \$2,669         \$2,086         \$2,636         (11,1         \$3,293	Apparatus Maintenance	28,913	29,082		31,327	33,834	36,281	35,742	4.3		35,579		36,397	0.9
Customer Service Operations - Vinnipog & North         \$ 43,748         \$ 44,302         \$ 42,044         44,893         48,121         49,635         2.6         48,808         49,931         0.3           Customer Service Operations - South         39,498         44,036         42,811         43,951         46,243         50,368         5.0         49,439         50,576         0.2           Distribution Planning & Design         66,608         7,378         7,157         8,075         8,541         7,718         3.2         8,555         8,752         65           Distribution Construction         2,253         688         (198)         910         694         2,216         (0.3)         942         964         (34.1)           Administration         9,2,107         96,964         9,2091         98,373         103,762         111,607         3.8         109,000         111,507         0.2           Customer Care & Marketing         10         9,2,107         9,664         9,2091         9,8373         103,762         111,607         3.8         109,000         111,507         0.2           Customer Care & Marketing         10         9,115         9,104         9,2449         9,669         2,086         2,636         (1,1)<	Administration	2,779	1,840		2,323	1,529	2,216	1,995	(6.4)		1,955		2,000	0.1
Customer Service Operations - Winnipeg & North         \$ 43,748         \$ 44,302         \$ 42,044         44,893         48,121         49,635         2.6         48,808         49,931         0.3           Customer Service Operations - South         39,498         44,036         42,811         43,951         46,243         50,368         5.0         49,439         50,576         0.2           Distribution Planning & Design         6,608         7,378         7,157         8,752         6,5         8,541         7,718         3.2         8,555         8,752         6,5           Distribution Construction         2,253         688         (198)         910         694         2,216         (0.3)         942         964         (34,1)           Administration         8         2,070         89,604         82,091         89,373         \$10,760         3.8         190,000         \$11,507         0.2           Customer Care & Marketing         Customer Care & Marketing         Customer Care & Marketing         2,2780         1,946         2,449         2,669         2,086         2,636         (1.1)         3,293         3,369         3,369         13.0           Consumer Marketing & Sales         9,115         9,104		\$ 77,978	\$ 77,810	\$	83,503	\$ 83,171	\$ 91,088	\$ 92,302	3.4	\$	92,400	\$	94,525	1.2
Customer Service Operations - South         39,498         44,036         42,811         43,951         46,243         50,368         5.0         49,439         50,576         0.2           Distribution Planning & Design         6,608         7,378         7,157         8,075         8,541         7,718         3.2         8,555         8,752         6.5           Distribution Construction         2,253         688         (198)         910         694         2,216         (0.3)         942         964         (34.1)           Administration         92,107         96,96         92,091         98,373         103,762         \$11,067         3.8         109,000         \$11,256         1,285         6.6           Customer Care & Marketing          92,107         96,96         92,091         98,373         \$10,762         \$11,067         3.8         109,000         \$11,256         1,285         6.6           Customer Care & Marketing           \$2,780         \$1,946         \$2,449         \$2,669         \$2,086         \$2,636         (1.1)         \$3,293         \$3,359         13.0           Consumer Marketing & Sales         9,115         9,104         9,346         8,264         8,904 </td <td>Customer Services &amp; Distribution</td> <td></td>	Customer Services & Distribution													
Distribution Planning & Design   G,608   7,378   7,157   8,075   8,541   7,718   3.2   8,555   8,752   6.5     Distribution Construction   2,253   6.88   (198   910   694   2,216   (0.3)   942   946   (34.1)     Administration   2,257   544   163   1,130   12.56   1,285   6.6     S 2,107   S 96,964   S 2,091   S 8,373   S 103,762   S 111,607   3.8   S 109,000   S 111,507   0.2     Distribution Construction   S 2,178   S 1,946   S 2,449   S 2,669   S 2,086   S 2,636   (1.1)   S 3,293   S 3,369   13.0     Consumer Marketing & Sales   9,115   9,104   9,346   8,264   8,904   10,019   1.9   10,341   10,579   2.8     Business Support Services   25,448   26,929   26,661   22,937   23,128   23,347   (1.7)   23,622   24,165   1.7     Administration   5,2357   4,676   4,869   4,989   6,377   6,865   5.1   5,744   5,876   (7.5)     Administration   44,700   44,655   43,825   38,859   44,955   42,867   0.1   44,000   44,989   1.3     Motor Vehicle Chargeout   (14,311   13,944   15,065   15,394   16,043   16,019   2.3   16,601   16,693   3.0     Payroll Tax   (7,602   6,136   6,344   6,874   6,679   6,007   6,007   6,007   6,007   6,007     ClCA Accounting Changes   (7,018   7,006   7,031   4,930   3,844   13,244   13,66   7,609   6,300   13,500     ClCA Accounting Changes   (7,018   6,5232   53,855   53,505   56,270   59,042   6,0511   3.5   7,1021   7,2447   2.4     Operating & Administration Charged to Centra   (55,232   53,855   53,055   53,505   56,270   59,042   6,0511   3.5   7,1021   7,2447   2.4     Operating & Administration Charged to Centra   (55,232   53,855   53,505   56,270   59,042   6,0511   3.5   7,1021   7,2447   2.4     Operating & Administration Charged to Centra   (55,232   53,855   65,235   6,2670   6,0942   6,0951   3.5   7,1021   7,2447   2.4     Operating & Administration Charged to Centra   (55,232   53,855   6,235   6,235   6,270   6,0942   6,0951   3.5   7,1021   7,2447   2.4     Operating & Administration Charged to Centra   (55,232   53,855   6,35,055   6,6270   6,942   6,0951   3.5   7,1021	Customer Service Operations - Winnipeg & North	\$ 43,748	\$ 44,302	\$	42,044	44,893	48,121	49,635	2.6		48,808		49,931	0.3
Distribution Construction	Customer Service Operations - South	39,498	44,036		42,811	43,951	46,243	50,368	5.0		49,439		50,576	0.2
Administration         7         560         277         544         163         1,130         1,256         1,285         6,6           Customer Care & Marketing         Industrial & Commercial Solutions         2,780         1,946         2,449         2,669         2,086         2,636         (1,1)         3,293         3,369         13.0           Consumer Marketing & Sales         9,115         9,104         9,346         8,264         8,904         10,019         1.9         10,341         10,579         2.8           Business Support Services         2,5448         26,929         26,661         22,937         23,128         23,347         (1,7)         23,622         24,165         1.7           Administration         5,357         4,676         4,869         4,989         6,377         6,865         5.1         5,744         5,876         (7,5)           Administration         42,700         42,655         43,325         38,859         40,495         42,867         0.1         \$43,000         \$43,000         43,989         1.3           Motor Vehicle Chargeout         (14,311)         (13,984)         (15,065)         (15,394)         (16,043)         (16,019)         2.3         (16,601)	Distribution Planning & Design	6,608	7,378		7,157	8,075	8,541	7,718	3.2		8,555		8,752	6.5
Customer Care & Marketing         \$ 92,107         \$ 96,964         \$ 92,091         \$ 98,373         \$ 103,762         \$ 111,067         3.8         \$ 109,000         \$ 111,507         0.2           Industrial & Commercial Solutions         \$ 2,780         \$ 1,946         \$ 2,449         \$ 2,669         \$ 2,086         \$ 2,636         (1.1)         \$ 3,293         \$ 3,369         13.0           Consumer Marketing & Sales         9,115         9,104         9,346         8,264         8,904         10,019         1.9         10,341         10,579         2.8           Business Support Services         25,448         26,929         26,661         22,937         23,128         23,347         (1.7)         23,622         24,165         1.7           Administration         5,357         4,676         4,869         4,989         6,377         6,865         5.1         5,744         5,876         (7.5)           Motor Vehicle Chargeout         (14,311)         (13,984)         (15,065)         (15,394)         (16,043)         (16,019)         2.3         (16,601)         (16,983)         3.0           Payroll Tax         (7,602)         (8,136)         (8,344)         (8,774)         (9,679)         (10,070)         5.8         (10,070) <td>Distribution Construction</td> <td>2,253</td> <td>688</td> <td></td> <td>(198)</td> <td>910</td> <td>694</td> <td>2,216</td> <td>(0.3)</td> <td></td> <td>942</td> <td></td> <td>964</td> <td>(34.1)</td>	Distribution Construction	2,253	688		(198)	910	694	2,216	(0.3)		942		964	(34.1)
Customer Care & Marketing         Industrial & Commercial Solutions         \$ 2,780         \$ 1,946         \$ 2,449         \$ 2,669         \$ 2,086         \$ 2,636         (1.1)         \$ 3,293         \$ 3,369         13.0           Consumer Marketing & Sales         9,115         9,104         9,346         8,264         8,904         10,019         1.9         10,341         10,579         2.8           Business Support Services         25,448         26,929         26,661         22,937         23,128         23,347         (1.7)         23,622         24,165         1.7           Administration         5,357         4,676         4,869         4,989         6,377         6,865         5.1         5,744         5,876         (7.5)           Motor Vehicle Chargeout         (14,311)         (13,984)         (15,065)         (15,394)         (16,043)         (16,019)         2.3         (16,601)         (16,983)         3.0           Payroll Tax         (7,602)         (8,136)         (8,344)         (8,774)         (9,679)         (10,070)         5.8         (10,070)         (10,272)         1.0           Corporate Allocations & Adjustments         (7,018)         (7,006)         (7,31)         (4,930)         (3,824)         (13,284)	Administration	-	560		277	544	 163	1,130			1,256		1,285	
Industrial & Commercial Solutions		\$ 92,107	\$ 96,964	\$	92,091	\$ 98,373	\$ 103,762	\$ 111,067	3.8	\$	109,000	\$	111,507	0.2
Consumer Marketing & Sales         9,115         9,104         9,346         8,264         8,904         10,019         1.9         10,341         10,579         2.8           Business Support Services         25,448         26,929         26,661         22,937         23,128         23,347         (1.7)         23,622         24,165         1.7           Administration         5,357         4,676         4,869         4,989         6,377         6,865         5.1         5,744         5,876         (7,5)           Motor Vehicle Chargeout         (14,311)         (13,984)         (15,065)         (15,394)         (16,043)         (16,019)         2.3         (16,601)         (16,983)         3.0           Payroll Tax         (7,602)         (8,136)         (8,344)         (8,774)         (9,679)         (10,070)         5.8         (10,070)         (10,272)         1.0           Corporate Allocations & Adjustments         (7,018)         (7,006)         (7,031)         (4,930)         (3,824)         (13,284)         13.6         (7,609)         (8,730)         (18.9)           CICA Accounting Changes*         -         -         -         -         -         -         -         -         -         -	Customer Care & Marketing				<u>-</u>									
Business Support Services         25,448         26,929         26,661         22,937         23,128         23,347         (1.7)         22,622         24,165         1.7           Administration         5,357         4,676         4,869         4,989         6,377         6,865         5.1         5,744         5,876         (7.5)           Motor Vehicle Chargeout         (14,311)         (13,984)         (15,065)         (15,394)         (16,043)         (16,019)         2.3         (16,601)         (16,983)         3.0           Payroll Tax         (7,602)         (8,136)         (8,344)         (8,774)         (9,679)         (10,070)         5.8         (10,070)         (10,272)         1.0           Corporate Allocations & Adjustments         (7,018)         (7,006)         (7,031)         (4,930)         (3,824)         (13,284)         13.6         (7,609)         (8,730)         (18.9)           CICA Accounting Changes*         -	Industrial & Commercial Solutions	\$ 2,780	\$ 1,946	\$	2,449	\$ 2,669	\$ 2,086	\$ 2,636	(1.1)	\$	3,293	\$	3,369	13.0
Administration 5,357 4,676 4,869 4,989 6,377 6,865 5.1 5,744 5,876 (7.5)	Consumer Marketing & Sales	9,115	9,104		9,346	8,264	8,904	10,019	1.9		10,341		10,579	2.8
Motor Vehicle Chargeout	Business Support Services	25,448	26,929		26,661	22,937	23,128	23,347	(1.7)		23,622		24,165	1.7
Motor Vehicle Chargeout (14,311) (13,984) (15,065) (15,394) (16,043) (16,019) 2.3 (16,601) (16,983) 3.0 Payroll Tax (7,602) (8,136) (8,344) (8,774) (9,679) (10,070) 5.8 (10,070) (10,272) 1.0 Corporate Allocations & Adjustments (7,018) (7,006) (7,031) (4,930) (3,824) (13,284) 13.6 (7,609) (8,730) (18,9) CICA Accounting Changes* 5,000 9,000 9,000 9,000 9,000 0.0 Provision for Accounting Changes 18,000 13,500 Operating & Administration Charged to Centra (55,232) (53,085) (53,505) (56,270) (59,042) (60,951) 2.0 (63,400) (64,000) 2.5 Capitalized Overhead	Administration													
Payroll Tax (7,602) (8,136) (8,344) (8,774) (9,679) (10,070) 5.8 (10,070) (10,272) 1.0 Corporate Allocations & Adjustments (7,018) (7,006) (7,031) (4,930) (3,824) (13,284) 13.6 (7,609) (8,730) (18.9) CICA Accounting Changes* 5,000 9,000 9,000 9,000 9,000 0.0 Provision for Accounting Changes 18,000 13,500 Coperating & Administration Charged to Centra (55,232) (53,085) (53,505) (56,270) (59,042) (60,951) 2.0 (63,400) (64,000) 2.5 Capitalized Overhead		\$ 42,700	\$ 42,655	\$	43,325	\$ 38,859	\$ 40,495	\$ 42,867	0.1	\$	43,000	\$	43,989	1.3
Payroll Tax (7,602) (8,136) (8,344) (8,774) (9,679) (10,070) 5.8 (10,070) (10,272) 1.0 Corporate Allocations & Adjustments (7,018) (7,006) (7,031) (4,930) (3,824) (13,284) 13.6 (7,609) (8,730) (18.9) CICA Accounting Changes* 5,000 9,000 9,000 9,000 9,000 0.0 Provision for Accounting Changes 18,000 13,500 Coperating & Administration Charged to Centra (55,232) (53,085) (53,505) (56,270) (59,042) (60,951) 2.0 (63,400) (64,000) 2.5 Capitalized Overhead	Motor Vehicle Chargeout	(14,311)	(13,984)		(15,065)	(15,394)	(16,043)	(16,019)	2.3		(16,601)		(16,983)	3.0
Corporate Allocations & Adjustments (7,018) (7,006) (7,031) (4,930) (3,824) (13,284) 13.6 (7,609) (8,730) (18.9) CICA Accounting Changes* 5,000 9,000 9,000 9,000 9,000 0.0 Provision for Accounting Changes 18,000 13,500 Coperating & Administration Charged to Centra (55,232) (53,085) (53,505) (56,270) (59,042) (60,951) 2.0 (63,400) (64,000) 2.5 Capitalized Overhead (58,174) (62,028) (61,887) (67,289) (65,743) (69,151) 3.5 (71,021) (72,447) 2.4	· ·													1.0
CICA Accounting Changes*  5,000 9,000 9,000 9,000 0.0  Provision for Accounting Changes  5,000 9,000 9,000 0.0  Provision for Accounting Changes  18,000 13,500  Operating & Administration Charged to Centra (55,232) (53,085) (53,505) (56,270) (59,042) (60,951) 2.0 (63,400) (64,000) 2.5  Capitalized Overhead (58,174) (62,028) (61,887) (67,289) (65,743) (69,151) 3.5 (71,021) (72,447) 2.4														(18.9)
Provision for Accounting Changes 18,000 13,500  Operating & Administration Charged to Centra (55,232) (53,085) (53,505) (56,270) (59,042) (60,951) 2.0 (63,400) (64,000) 2.5  Capitalized Overhead (58,174) (62,028) (61,887) (67,289) (65,743) (69,151) 3.5 (71,021) (72,447) 2.4		-	-											0.0
Operating & Administration Charged to Centra       (55,232)       (53,085)       (53,505)       (56,270)       (59,042)       (60,951)       2.0       (63,400)       (64,000)       2.5         Capitalized Overhead       (58,174)       (62,028)       (61,887)       (67,289)       (65,743)       (69,151)       3.5       (71,021)       (72,447)       2.4		-	-		-	-					18,000		13,500	
Capitalized Overhead (58,174) (62,028) (61,887) (67,289) (65,743) (69,151) 3.5 (71,021) (72,447) 2.4	<u> </u>	(55,232)	(53.085)		(53,505)	(56.270)	(59.042)	(60.951)	2.0		(63,400)		(64.000)	2.5
Operating & Administrative Costs Attributable to Electric Operations \$ 298,613 \$ 310,658 \$ 323,465 \$ 322,697 \$ 364,287 \$ 377,551 4.8 \$ 397,695 \$ 401,870 3.2														
	Operating & Administrative Costs Attributable to Electric Operations	\$ 298,613	\$ 310,658	\$	323,465	\$ 322,697	\$ 364,287	\$ 377,551	4.8	\$	397,695	\$ 4	401,870	3.2

<sup>\*</sup> Other CICA Accounting Changes totalling \$4.6 million in 2008/09 and \$4.0 million in 2009/10 & future years are embedded within the Total Costs

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**Reference: PUB/MH I-32 (b) (c), (d)- OM&A** 

b) Please provide the same analysis in PUB/MH I-32 (d) comparing the actual versus forecast for electric operations for 2009/10. Please provide a similar analysis for 2010/11 between the IFF09 forecast and any update for the year.

## **ANSWER**:

Please refer to the following schedules comparing the actual versus forecast for electric operations for 2009/10.

## MANITOBA HYDRO OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY BUSINESS UNIT

	2009/10 Actual	2009/10 orecast	_	ariance	%	Ref
President & CEO	\$ 28,131	\$ 24,475	\$	(3,656)	-15%	1
Corporate Relations	4,698	5,100		402	8%	
Corporate Planning and Strategic Analysis	3,446	3,700		254	7%	
Finance and Administration	108,441	108,755		314	0%	
Power Supply	147,074	145,000		(2,074)	-1%	
Transmission	92,302	91,100		(1,202)	-1%	
Customer Service and Distribution	111,067	107,300		(3,767)	-4%	
Customer Care and Marketing	42,867	42,000		(867)	-2%	
Business Unit Subtotal	538,026	527,430		(10,596)	-2%	
Motor Vehicle Chargeout	(16,019)	(16,154)		(135)	1%	
Payroll Tax	(10,070)	(9,873)		197	-2%	
Corporate Allocations & Adjustments	(13,284)	(8,775)		4,509	-51%	2
CICA Accounting Changes*	9,000	7,000		(2,000)	-29%	3
Provision for IFRS	-	-		-	0%	
Operating & Administration Charged to Centra	(60,951)	(60,160)		791	-1%	
Capitalized Overhead	(69,151)	(67,964)		1,187	-2%	
OM&A Costs Attributable to Electric Operations *	\$ 377,551	\$ 371,504	\$	(6,047)	-2%	

Variances Greater than 5% and \$500 are explained.

 $<sup>\</sup>ensuremath{^{*}}$  Note - OM&A figures do not include subsiduary amounts.

# MANITOBA HYDRO OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY BUSINESS UNIT 2010 VARIANCE EXPLANATIONS

Ref	Business Unit	Fav (Unfav)	Explanation
1	President & CEO	\$ (3,656)	Higher consulting and professional fees (\$3 853 U) primarily associated with the Risk Management review.
2	Corporate Allocations & Adjustments	4,509	Primarily due to lower current service benefit costs (Sick Leave Vesting, Vacation and newly negotiated Health Benefits).
3	CICA Accounting Changes	(2,000)	Actuals reflect the removal of property taxes from Administrative and General Overhead capitalized

MANITOBA HYDRO OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY COST ELEMENT

	2009/10 Actual	2009/10 Forecast	2009/10 Variance	%	Ref
Wages, Salaries	\$ 407,988	\$ 411,832	\$ 3,844	1%	
Overtime	50,307	47,248	(3,059)	-6%	1
Employee Benefits	82,674	85,872	3,198	4%	
Employee Safety & Training	4,623	4,357	(266)	-6%	
Travel	32,435	31,960	(475)	-1%	
Motor Vehicle	24,281	22,967	(1,314)	-6%	2
Materials & Tools	26,897	25,762	(1,135)	-4%	
Consulting & Professional Fees	14,814	10,593	(4,221)	-40%	3
Construction & Maintenance Services	20,109	21,489	1,380	6%	4
Building & Property Services	22,931	20,506	(2,425)	-12%	5
Equipment Maintenance & Rentals	14,379	13,794	(585)	-4%	
Consumer Services	5,798	5,572	(226)	-4%	
Computer Services	983	682	(301)	-44%	
Collection Costs	4,599	4,430	(169)	-4%	
Customer & Public Relations	8,155	5,870	(2,285)	-39%	6
Sponsored Memberships	1,325	1,242	(83)	-7%	
Office & Administration	15,320	15,326	6	0%	
Communication Systems	1,772	1,572	(200)	-13%	
Research & Development Costs	3,952	4,029	77	2%	
Miscellaneous Expense	1,190	1,066	(124)	-12%	
Contingency Planning	-	3,994	3,994	100%	7
Operating Expense Recovery	(21,580)	(16,462)	5,118	-31%	8
otal Costs	722,951	723,701	750	0%	
Capital Order Activities	(224,298)	(231,073)	(6,775)	3%	
CICA Accounting Changes*	9,000	7,000	(2,000)	-29%	9
Provision for IFRS	-	-	-		
Capitalized Overhead	(69,151)	(67,964)	1,187	-2%	
Operating and Administration Charged to Centra	(60,951)	(60,160)	791	-1%	
M&A Attributable to Electric Operations	\$ 377,551	\$ 371,504	\$ (6,047)	-2%	

Variances Greater than 5% and \$500 are explained.

# MANITOBA HYDRO OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY COST ELEMENT 2009 VARIANCE EXPLANATIONS

Ref	Cost Element	Fav (Unfav)	Explanation
1	Overtime	(3,059)	Higher due to requirements driven by capital projects, outage schedules, storm restorations, system emergencies, flood preparations and the strike.
2	Motor Vehicle	(1,314)	Higher due to increased repair and maintenance costs and higher insurance premiums.
3	Consulting & Professional Fees	(4,221)	Higher due to Risk Management review, DSM programs costs expensed due to changes in CICA accounting standards, and higher number of employee relocations and associated costs.
4	Construction & Maintenance Services	1,380	Lower due to reduced requirements for backhoe and dump truck units and associated costs, cancelled winter road maintenance due to mild weather conditions, lower maintenance service costs for the Grand Rapid Fish Hatchery and lower utilization of external contractors for Northern Generation operations.
5	Building & Property Services	(2,425)	Higher due to lease and building service costs resulting from delayed moves to 360 Portage, increased usage of staffhouses, security services during the strike and higher value of insurance claims.
6	Customer & Public Relations	(2,285)	DSM program costs for business communications expensed due to changes in CICA accounting standards. Also higher corporate donations and sponsorships.
7	Contingency Planning	3,994	Unallocated general contingency.
8	Operating Expense Recovery	5,118	Higher revenue due to subsidiary recoveries; business initiative revenue mainly related to Stony Mountain Penitentiary, MDS Aero Glacier and St Joseph Wind farm as well as increased staffhouse utilization.
9	CICA Accounting Changes	(2,000)	Actuals reflect the removal of property taxes from Administrative and General Overhead capitalized.

**Reference:** PUB/MH I-45 (b)

Please file an update to PUB/MH I-45 (b) for the export revenue assumptions in IFF 10 for the 20-year forecast.

## **ANSWER:**

Please see the schedule provided in response to PUB/MH/PRE-ASK-2.

Reference: PUB/MH II-3 (a) & (b) OM&A Cost per Customer

Please file a schedule in similar format to PUB/MH II-3(a) providing a comparison between IFF10 and IFF09. Please recast (b) based on IFF10.

## ANSWER:

Please see the following tables for a comparison of the OM&A cost per customer for the years 2009 through 2017 (IFF10 to IFF09). In the second table, the impact of accounting changes is separately disclosed.

The initial increase in cost per customer is attributable to OM&A cost increases as a result of early adoption of accounting changes and revised estimates for Wuskwatim. Over time, these increases are offset by an increased customer forecast.

	Actu	al	Forecast - IFF10								
	2009	2010	2011	2012	2013	2014	2015	2016	2017		
OM&A expense 'electric only' (\$ millions)	364	378	398	402	414	422	430	439	448		
# of Customers	527,472	532,359	538,002	543,574	548,659	553,369	558,059	562,706	567,338		
OM&A (electric only) per customer (in dollars)	691	709	739	739	754	762	771	780	789		
	Actual				Forecast	- IFF09					
	2009	2010	2011	2012	2013	2014	2015	2016	2017		
OM&A expense 'electric only' (\$ millions)	364	372	380	403	411	420	428	437	445		
# of Customers	527,472	531,804	536,267	540,756	545,215	549,623	553,968	558,286	562,580		
OM&A (electric only) per customer (in dollars)	691	699	708	746	755	764	773	782	792		
					Change						
	2009	2010	2011	2012	2013	2014	2015	2016	2017		
OM&A (electric only) per customer (in dollars)	-	11	31	(6)	(0)	(1)	(2)	(2)	(2)		

	Actu	ual			For	ecast - IFF1	0		
(in millions of dollars)	2009	2010	2011	2012	2013	2014	2015	2016	2017
OM&A expense 'electric only'	354	365	367	375	387	395	403	412	421
CICA Accounting Changes:									
Reduction in Stores Overhead Capitalized	5	5	5	5	5	5	5	5	5
Reduction in Intangible Assets Capitalized	5	4	4	4	4	4	4	4	4
Reduction in Administrative & General Overhead Capitalized	-	4	4	4	4	4	4	4	4
IFRS Accounting Changes	-	-	18	14	14	14	14	14	14
Total OM&A expense 'electric only'	364	378	398	402	414	422	430	439	448
# of Customers	527,472	532,359	538,002	543,574	548,659	553,369	558,059	562,706	567,338
OM&A (electric only) per customer (in dollars)	691	709	739	739	754	762	771	780	789
					<b>-</b>	IEEOO			
(in millions of dollars)	Actual	2040	2044	2042	Forecast		2045	2046	0047
(in millions of dollars)	2009	2010	2011	2012	2013	2014	2015	2016	2017
OM&A expense 'electric only'	354	361	369	377	385	394	402	411	419
CICA Accounting Changes:	_	_	_	_	_	_	_	_	_
Reduction in Stores Overhead Capitalized	5	5 4	5	5	5	5	5	5	5
Reduction in Intangible Assets Capitalized Reduction in Administrative & General Overhead Capitalized	5	2	2	4	2	2	2	2	4
•	-	2	2	15	15	15	15	15	15
IFRS Accounting Changes Total OM&A expense 'electric only'	364	372	380	403	411	420	428	437	445
# of Customers	527,472	531,804	536,267	540,756	545,215	549,623	553,968	558,286	562,580
OM&A (electric only) per customer (in dollars)	691	699	708	746	755	764	773	782	792
OMAA (electric only) per customer (in dollars)	091	099	708	740	755	704	113	702	192
					Change				
(in millions of dollars)	2009	2010	2011	2012	2013	2014	2015	2016	2017
OM&A (electric only) per customer (in dollars)	-	11	31	(6)	(0)	(1)	(2)	(2)	(2)

## PUB/MH/PRE-ASK-15 (REVISED)

Reference: PUB/MH II-23 (a) EFT

a) Please update PUB/MH II-23 (a) to incorporate actual 2009/10 and updated 2010/11 and 2011/12 results.

## **ANSWER:**

The following schedule updates PUB/MH I-23(a) to incorporate actual results for 2009/10. Please note that 2008/09 has also been restated to reflect changes in accounting standards for intangible assets. In addition, IFF10 OM&A targets have been adjusted to reflect the provision for accounting changes.

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MANITOBA HYDRO
OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY COST ELEMENT

										(000's)
	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08 Actual	2008/09 Actual	Fiscal 2004/05-2008/09 Compounded Annual Growth	2009/10 Actual	2010/11 Forecast	2011/12 Forecast	Fiscal 2008/09-2011/12 Compounded Growtl % Inc/(Dec)
Labour										
Wages, Salaries	\$ 320,808	\$ 332,257	\$ 344,701	\$ 359,249	\$ 380,031	4.3	\$ 407,988	\$ 415,215	\$ 424,765	3.8
Overtime	33,842	38,032	38,896	41,781	45,890	7.9	50,307	48,061	49,166	2.3
Employee Benefits	68,442	70,184	73,636	76,807	83,671	5.2	82,674	93,035	95,175	4.4
Subtotal - Labour and Benefits	423,093	440,473	457,233	477,838	509,592	4.8	540,968	556,311	569,106	3.8
EFTs (Straight Time + Overtime)	5,885	5,999	6,007	6,090	6,312	1.8	6,465	6,704	6,704	2.0
Labour & Benefits per EFT	72	73	76	78	81	2.9	84	83	85	1.7
Employee Safety & Training	5,275	3,686	3,487	3,646	4,145	(5.8)	4,623	4,747	4,856	5.4
Travel	23,534	26,212	27,729	28,331	31,812	7.8	32,435	32,963	33,721	2.0
Motor Vehicle	17,726	19,380	19,731	22,423	24,126	8.0	24,281	23,114	23,646	(0.7)
Materials & Tools	23,893	26,046	25,414	27,824	29,345	5.3	26,897	26,178	26,780	(3.0)
Consulting & Professional Fees	7,269	7,229	8,498	7,503	9,704	7.5	14,814	10,904	11,155	4.8
Construction & Maintenance Services	13,345	13,700	13,711	15,938	18,378	8.3	20,109	21,785	22,286	6.6
Building & Property Services	21,031	22,973	24,697	25,740	28,947	8.3	22,931	20,671	21,146	(9.9)
Equipment Maintenance & Rentals	9,546	10,720	11,606	11,719	13,029	8.1	14,379	13,858	14,177	2.9
Consumer Services	4,203	4,301	4,316	4,651	5,284	5.9	5,798	5,683	5,814	3.2
Computer Services	3,959	4,293	2,622	1,131	858	(31.8)	983	696	712	(6.0)
Collection Costs	5,161	6,790	7,218	5,256	5,019	(0.7)	4,599	4,542	4,646	(2.5)
Customer & Public Relations	5,223	5,585	6,493	6,665	6,901	7.2	8,155	6,014	6,152	(3.8)
Sponsored Memberships	1,149	1,012	1,187	1,192	1,465	6.3	1,325	1,267	1,296	(4.0)
Office & Administration	15,447	15,902	14,939	14,427	14,652	(1.3)	15,320	15,703	15,857	2.7
Communication Systems	1,844	1,447	1,866	1,353	1,449	(5.8)	1,772	1,603	1,640	4.2
Research & Development Costs	3,685	2,874	3,251	2,979	3,059	(4.6)	3,952	4,110	4,205	11.2
Miscellaneous Expense	2,470	2,811	2,422	3,292	903	(22.2)	1,190	1,087	1,112	7.2
Contingency Planning	-	-	-	-	-		-	5,417	3,921	
Operating Expense Recovery	(18,105)	(19,205)	(20,570)	(23,314)	(21,519)	4.4	(21,580)	(16,497)	(16,670)	(8.2)
<b>Total Costs</b>	569,749	596,229	615,849	638,594	687,149	4.8	722,951	740,156	755,558	3.2
Capital Order Activities	(157,730)	(170,458)	(176,992)	(192,338)	(203,077)	6.5	(224,298)	(235,040)	(239,741)	5.7
CICA Accounting Changes*	-	-	-	- 1	5,000		9,000	9,000	9,000	21.6
Provision for Accounting Changes	-	-	-	-	· -		´-	18,000	13,500	
Capitalized Overhead	(58,174)	(62,028)	(61,887)	(67,289)	(65,743)	3.1	(69,151)	(71,021)	(72,447)	3.3
Operating and Administration Charged to Centra	(55,232)	(53,085)	(53,505)	(56,270)	(59,042)	1.7	(60,951)	(63,400)	(64,000)	
OM&A Attributable to Electric Operations	\$ 298,613	\$ 310,658	\$ 323,465	\$ 322,697	\$ 364,287	5.1	\$ 377,551	\$ 397,695	\$ 401,870	3.3

<sup>\*</sup> Other CICA Accounting Changes totalling \$4.6 million in 2008/09 and \$4.0 million in 2009/10 & future years are embedded within the Total Costs

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## PUB/MH/PRE-ASK-15 (REVISED)

Reference: PUB/MH II-23 (a) EFT

b) Please provide the Compounded Annual Growth for the 2004/05 to 2009/10 and 2009/10 to 2011/12.

## **ANSWER:**

Please see the following schedule which incorporates actual results for 2009/10. Please note that 2008/09 has been restated to reflect changes in accounting standards for intangible assets. In addition, IFF10 OM&A targets have been adjusted to reflect the provision for accounting changes.

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MANITOBA HYDRO
OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY COST ELEMENT

	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08 Actual	2008/09 Actual	2009/10 Actual	Fiscal 2004/05-2009/10 Compounded Annual Growth	2010/11 Forecast	2011/12 Forecast	(000's) Fiscal 2009/10-2011/12 Compounded Growt % Inc/(Dec)
Labour	d 220 000	¢ 222 257	Ф. 244.701	d 250 240	d 200 021	¢ 407.000	4.0	ф. 415.015	A 424 765	2.0
Wages, Salaries	\$ 320,808	\$ 332,257	\$ 344,701	\$ 359,249	\$ 380,031	\$ 407,988	4.9	\$ 415,215	\$ 424,765	
Overtime Employee Benefits	33,842 68,442	38,032 70,184	38,896 73,636	41,781 76,807	45,890 83,671	50,307 82,674	8.3 3.9	48,061 93,035	49,166 95,175	(1.1) 7.3
Subtotal - Labour and Benefits	423,093	440,473	457,233	477,838	509,592	540,968	5.0	556,311	569,106	2.6
EFTs (Straight Time + Overtime)	5,885	5,999	6,007	6,090	6,312	6,465	1.9	6,704	6,704	1.8
Labour & Benefits per EFT	72	73	76	78	81	84	3.1	83	85	0.7
Employee Safety & Training	5,275	3,686	3,487	3,646	4,145	4,623	(2.6)	4,747	4,856	2.5
Travel	23,534	26,212	27,729	28,331	31,812	32,435	6.6	32,963	33,721	2.0
Motor Vehicle	17,726	19,380	19,731	22,423	24,126	24,281	6.5	23,114	23,646	(1.3)
Materials & Tools	23,893	26,046	25,414	27,824	29,345	26,897	2.4	26,178	26,780	(0.2)
Consulting & Professional Fees	7,269	7,229	8,498	7,503	9,704	14,814	15.3	10,904	11,155	(13.2)
Construction & Maintenance Services	13,345	13,700	13,711	15,938	18,378	20,109	8.5	21,785	22,286	5.3
Building & Property Services	21,031	22,973	24,697	25,740	28,947	22,931	1.7	20,671	21,146	(4.0)
Equipment Maintenance & Rentals	9,546	10,720	11,606	11,719	13,029	14,379	8.5	13,858	14,177	(0.7)
Consumer Services	4,203	4,301	4,316	4,651	5,284	5,798	6.6	5,683	5,814	0.1
Computer Services	3,959	4,293	2,622	1,131	858	983	(24.3)	696	712	(14.9)
Collection Costs	5,161	6,790	7,218	5,256	5,019	4,599	(2.3)	4,542	4,646	0.5
Customer & Public Relations	5,223	5,585	6,493	6,665	6,901	8,155	9.3	6,014	6,152	(13.1)
Sponsored Memberships	1,149	1,012	1,187	1,192	1,465	1,325	2.9	1,267	1,296	(1.1)
Office & Administration	15,447	15,902	14,939	14,427	14,652	15,320	(0.2)	15,703	15,857	1.7
Communication Systems	1,844	1,447	1,866	1,353	1,449	1,772	(0.8)	1,603	1,640	(3.8)
Research & Development Costs	3,685	2,874	3,251	2,979	3,059	3,952	1.4	4,110	4,205	3.2
Miscellaneous Expense	2,470	2,811	2,422	3,292	903	1,190	(13.6)	1,087	1,112	(3.3)
Contingency Planning	-	-	-	-	-	-		5,417	3,921	
Operating Expense Recovery	(18,105)	(19,205)	(20,570)	(23,314)	(21,519)	(21,580)	3.6	(16,497)	(16,670)	(12.1)
Total Costs	569,749	596,229	615,849	638,594	687,149	722,951	4.9	740,156	755,558	2.2
Capital Order Activities	(157,730)	(170,458)	(176,992)	(192,338)	(203,077)	(224,298)	7.3	(235,040)	(239,741)	
CICA Accounting Changes*	-	-	-	-	5,000	9,000		9,000	9,000	0.0
Provision for Accounting Changes	-	-	-	-	-	-		18,000	13,500	
Capitalized Overhead	(58,174)	(62,028)	(61,887)	(67,289)	(65,743)	(69,151)	3.5	(71,021)	(72,447)	
Operating and Administration Charged to Centra Adjustment per IFF10	(55,232)	(53,085)	(53,505)	(56,270)	(59,042)	(60,951)	2.0	(63,400)	(64,000)	2.5
OM&A Attributable to Electric Operations	\$ 298,613	\$ 310,658	\$ 323,465	\$ 322,697	\$ 364,287	\$ 377,551	4.8	\$ 397,695	\$ 401,870	3.2

<sup>\*</sup> Other CICA Accounting Changes totalling \$4.6 million in 2008/09 and \$4.0 million in 2009/10 & future years are embedded within the Total Costs

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**Reference: PUB/MH II-202 Financial Targets** 

Please refile the response for the 20-year forecast for IFF10 electric operations.

## **ANSWER:**

The 20-year forecast for IFF10 will be provided upon approval by the Manitoba Hydro-Electric Board, which is expected late January 2011.

**Reference: IFRS** 

Please populate the following table to include the accounting options under IFRS, the treatment prescribed by the Ontario Energy Board and the Alberta Utility Commissions and that currently followed by MH and that proposed to be followed by MH.

				Manitoba	Manitoba
Issue	<b>IFRS</b>	OEB	AUC	Hydro	Hydro
				(current)	(proposed)
Regulatory Assets and					
Liabilities					
Property Plant &					
Equipment					
Borrowing Costs					
• Customer					
Contributions					
Asset reclassifications					
from PPE to					
intangible assets					
Asset retirement					
obligations					
Gains and losses on					
disposition of assets					
• Treatment of asset					
impairment					
Depreciation					
Inventory Valuation					
Financial Reporting					
<b>Application Reporting</b>					

## ANSWER:

Manitoba Hydro has provided its most recent update on the status of IFRS separately (Appendix 78). That document provides the most current overview of the implications of IFRS on Manitoba Hydro's financial accounting and reporting.

The following tables provide a summary of this information in tabular form along with the requested information available from the AUC and OEB. Note that the AUC and OEB directives apply to rate setting processes and do not directly apply to external financial reporting requirements.

Information provided on the OEB was derived from the OEB report "EB-2008-0408, Report of the Board, Transition to International Financial Reporting Standards" (July 28, 2009); including the November 2010 update to Appendix 2 of the report. Information provided on the AUC was derived from AUC Rule 026 (May 19, 2009).

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	Regulatory Assets and Liabilities						
IFRS	No specific standard exists under IFRS regarding the accounting for rate						
	regulated assets and liabilities.						
	Recently the Canadian Electrical Association and the "Big 4" accounting firms						
	have agreed to review and assess the extent to which the actions of rate regulators						
	result in assets and liabilities that can be recognized in accordance within the						
	existing framework in IFRS.						
MH	MH recognizes the impact of rate-regulation by applying various accounting						
Current	policies that allow for the deferral of certain costs or credits which will be						
	recovered or refunded in future rates.						
MH	MH is proposing to continue with rate-regulated accounting assuming this						
Proposed	method of accounting is available under IFRS. In the absence of rate-regulated						
	accounting, existing rate-regulated balances may have to be adjusted to retained						
	earnings upon transition to IFRS and future amounts included in the						
	determination of net income in the year incurred.						
OEB	The OEB will continue to use deferral and variance accounts for rate making in						
	appropriate circumstances, whether or not these accounts are recognized under						
	IFRS.						
	The OEB may consider the review and adjustment of its existing approach when						
	the rulings from the International Accounting Standards Board are received and						
	the interpretation of IFRS becomes clearer.						
AUC	Utilities shall maintain the existing practice of applying to the Commission for						
	approval of any deferral accounts that may be required for the purpose of						
	establishing Regulatory Assets and Liabilities and proposing the mechanism for						
	their disposition.						

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	Property Plant & Equipment - Borrowing Costs					
IFRS	As per IAS 23, para. 1 "Borrowing costs that are directly attributable to the					
	acquisition, construction, or production of a qualifying asset form part of the cost					
	of that asset. Other borrowing costs are recognized as an expense."					
MH	MH's interest capitalization rate consists of the weighted average debt rate for all					
Current	debt outstanding for the period, including anticipated borrowings in the					
	upcoming fiscal year. Where debt is designated to finance a particular capital					
	project, MH will capitalize interest to the asset based on the interest rate from					
	that designated debt issue. MH is applying this approach for its 2010/11 fiscal					
	year under Canadian GAAP.					
MH	No future changes are proposed upon transition to IFRS					
Proposed						
OEB	The OEB will continue to publish interest rates for CWIP as it does now. When					
	incurred debt is acquired on an arms length basis, the actual borrowing cost					
	should be used for determining the amount of carrying charges to be capitalized					
	to CWIP for rate making during the period, in accordance with IFRS. Where					
	incurred debt is not acquired on an arm's length basis, the actual borrowing cost					
	may be used for rate making, provided that the interest rate is no greater than the					
	OEB's published rates. Otherwise, the distributor should use the OEB's					
	published rates.					
AUC	Subject to subsection (ii), Utilities shall maintain the Existing Accounting					
	Practice of including the debt and equity components of AFUDC when					
	accounting for construction work in progress and plant in service.					
	(ii) Utilities may submit an application to the AUC requesting approval to make					
	their Regulatory Accounting practice the same as the practice under IFRS					

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	Property Plant & Equipment - Customer Contributions					
IFRS	Under IFRS, customer contributions are to be recognized as revenue; either					
	immediately or over some future period of time. The customer contribution					
	recognized as revenue based upon the performance obligations of the underlying					
	arrangement.					
MH	Currently, non-refundable contributions in aid of construction are separately					
Current	recorded on the balance sheet and amortized to income on a straight-line basis as					
	a reduction to depreciation over the life of the related item of PP&E.					
MH	MH is proposing that customer contributions be recognized as deferred revenue					
Proposed	upon transition to IFRS where the revenue will be recognized over the life of the					
	related plant asset. This will result in little or no impact to net income. However					
	classification on the income statement will change as the amortization of the					
	contribution that was previously recognized as an offset in depreciation expense					
	will now be recognized as revenue.					
OEB	For regulatory reporting and rate making purposes, customer contributions wi					
	be treated as deferred revenue to be included as an offset to rate base					
	amortized to income over the life of the facilities to which they relate.					
	Distributors should confirm in the introduction to their first rates application after					
	the IFRS transition that the amortization period is being adjusted on an ongoing					
	basis.					
AUC	Utilities shall maintain the Existing Accounting Practice of recognizing customer					
	contributions in their Property, Plant & Equipment accounts and including the					
	amortization as an offset to depreciation.					

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	Property Plant & Equipment - Asset Reclassifications from PPE to						
	Intangible Assets						
IFRS	As per IAS 38, para. 8 "An intangible asset is an identifiable non-monetary asset						
	without physical substance."						
	As per IAS 38, para. 4. "Some intangible assets may be contained in or on						
	physical substance such as a compact disc (in the case of computer software)						
	legal documentation (in the case of a licence or patent) or film. In determining						
	whether an asset that incorporates both intangible and tangible elements should						
	be treated under IAS16 Property, Plant and Equipment or as an intangible asset						
	under this Standard, an entity uses judgment to assess which element is more						
	significant."						
MH	Upon adoption of CICA section 3064 for its March 2010 year end, MH						
Current	reclassified (April 1, 2008 balances, net of accumulated amortization) \$10						
	million of Computer Software development and \$37 million of Easements from						
	Property, Plant & Equipment to a separate category titled Goodwill and						
	Intangible Assets.						
MH	No future changes are proposed upon transition to IFRS.						
Proposed							
OEB	Where IFRS requires certain assets to be recorded as intangible assets that were						
	previously included in PP&E (e.g. computer software and land rights), utilities						
	shall include such intangible assets in rate base and the amortization expense in						
	depreciation expense for determining revenue requirement.						
AUC	Utilities shall maintain the Existing Accounting Practice of recognizing						
	intangible assets as part of their Property, Plant & Equipment accounts.						

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	Property Plant & Equipment - Asset Retirement Obligations						
IFRS	As per IAS 16, para. 16 "The cost of an item of property, plant and equipment						
	comprises:,						
	(c) the initial estimate of the costs of dismantling and removing the item and						
	restoring the site on which it is located, the obligation for which an entity incurs						
	either when the item is acquired or as a consequence of having used the item						
	during a particular period for purposes other than to produce inventories d						
	that period."						
	As per IAS37 para. 10, "A constructive obligation is an obligation that derives						
	from an entity's actions where:						
	(a) by an established pattern of past practice, published policies or a sufficiently						
	specific current statement, the entity has indicated to other parties that it will						
	accept certain responsibilities; and						
	(b) as a result, the entity has created a valid expectation on the part of those other						
	parties that it will discharge those responsibilities."						
MH	Under GAAP, MH has recognized AROs for the decommissioning of two						
Current	thermal generating stations and a hydraulic generating station, as well as for the						
	removal and disposal of PCB's in HVDC converter station capacitors.						
MH	MH has reviewed its circumstances under IFRS and has preliminarily concluded						
Proposed	that no new provisions exist pertaining to constructive obligations. MH will						
	recognize such obligations when a commitment is made to decommission an						
	asset and significant removal and/or remediation costs are expected to be						
	incurred						
OEB	Utilities shall identify separately in their rate applications the depreciation						
	expense associated with amortizing asset retirement costs and the accretion						
	expense associated with the amortization of the asset retirement obligations. The						
	OEB will assess these costs independently of other amortization costs to						
	determine the portion, if any, of these costs that should be recovered in revenue						
	requirement.						
AUC	Subject to subsection (ii), Utilities shall maintain the Existing Accounting						
	Practice regarding the treatment of asset retirement obligations and future						
	removal and site restoration costs.						
	(ii) Utilities may, by way of application to the AUC, request approval to account						
	for asset retirement obligations and future removal and site restoration costs in						
	accordance with IFRS.						

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	Property Plant & Equipment - Gains and Losses on Disposition of Assets					
IFRS	As per IAS 16, para. 68 "The gain or loss arising from the derecognition of an					
	item of property, plant and equipment shall be included in profit or loss when the					
	item is derecognised, Gains shall not be classified as revenue."					
MH	MH currently recognizes gains and losses on the retirement of plant assets in					
Current	accumulated depreciation.					
MH	Upon transition to IFRS, MH is planning to recognize gains and losses on asset					
Proposed	retirements to net income as they occur.					
OEB	Where a utility for financial reporting purposes under IFRS has accounted for the					
	amount of gain or loss on the retirement of assets in a pool of like assets as a					
	charge or credit to income, for reporting and rate application filings the utility					
	shall reclassify such gains and losses as depreciation expense and disclose the					
	amount separately. Where a utility for financial reporting purposes under IFRS					
	has reported a gain or loss on disposition of individual assets, such amounts					
	should be identified separately in rate filings for review by the OEB.					
AUC	Utilities shall maintain the Existing Accounting Practice of recording gains and					
	losses upon retirement or disposal of assets. Utilities shall identify and record any					
	difference in accounting between the IFRS reporting requirements and these					
	regulatory reporting requirements in a separate subsidiary accumulated					
	depreciation account.					

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	Property Plant & Equipment - Treatment of Asset Impairment						
IFRS	As per IAS 36, para 9. "An entity shall assess at the end of each reporting period						
II'NS							
	whether there is any indication that an asset may be impaired. If any su						
	indication exists, the entity shall estimate the recoverable amount of the asset.						
	para. 60, "An impairment loss shall be recognised immediately in profit or loss,						
	unless the asset is carried at revalued amount in accordance with another						
	Standard."						
MH	Under CGAAP, long-lived assets should be tested whenever events or changes in						
Current	circumstances indicate their carrying amount may not be recoverable. M						
	performs an annual impairment test on its goodwill balances which have not						
	indicated any impairment to date.						
MH	MH does not anticipate any substantial changes to its annual impairment testing						
Proposed	requirements.						
OEB	Where for financial reporting purposes under IFRS a utility has recorded an asset						
	impairment loss, for rate application filings such losses shall be reclassified to						
	PP&E and identified separately to allow consideration of whether and how such						
	amounts are to be reflected in rates.						
AUC	Utilities shall maintain the Existing Accounting Practice of having no						
	impairment (or impairment reversal) charges included when providing or						
	reporting financial information to the AUC.						

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	Depreciation						
IFRS	As per IAS 16, para. 43 "Each part of an item of property, plant and equipment						
	with a cost that is significant in relation to the total cost of the item shall be						
	depreciated separately."						
	para. 60, "The depreciation method used shall reflect the pattern in which the						
	asset's future economic benefits are expected to be consumed by the entity.						
MH	MH currently depreciates its PP&E component groupings on a straight-line						
Current	remaining-life basis.						
MH	MH is reviewing its asset component groupings and will establish new groupings						
Proposed	as necessary to comply with IFRS requirements. New depreciation rates will be						
	established for implementation upon transition to IFRS. In conjunction with this,						
	Manitoba Hydro proposes to eliminate the pre-collection of the cost of removing						
	retired assets from its depreciation accounting as this concept is not allowed						
	under IFRS.						
OEB	Utilities should continue to use the straight line method of depreciation for						
	regulatory accounting purposes.						
	The OEB will undertake a depreciation study for electricity distributors. Until the						
	study is completed, electricity distributors may continue to use their existing service lives for rate setting purposes. Any electrical distributor retains the option of demonstrating, through a well-founded depreciation study, that the OEB should approve specific depreciation methodologies and rates for that distributor.						
AUC	(i) Depreciation Rates						
	A. Subject to subsection (B), Utilities shall continue to use the depreciation rates						
	utilized under the Existing Accounting Practice.						
	B. If the adoption of the IFRS requirements for external financial reporting						
	results in depreciation rates that differ from Existing Accounting Practice or						
	results in a difference in the timing of commencement of depreciation, or both,						
	then a Utility may, by way of application to the AUC, request approval to						
	account for regulatory depreciation in accordance with IFRS.						
	(iii) Componentization						
	A. Subject to subsection (B), with respect to componentization, Utilities shall						
	record assets at the level of detail being reported under the Existing Accounting						
	Practice.						
	B. If the adoption of IFRS requirements for external financial reporting results in						
	a different level of componentization, then a Utility may, by way of application						
	to the AUC, request approval to account for regulatory componentization in						
	accordance with IFRS.						
l							

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	Inventory Valuation						
IFRS	As per IAS 2, para. 9 "Inventories shall be measured at the lower of cost and net						
	realisable value."						
	para. 10 "The cost of inventories shall comprise all costs of purchase, costs of						
	conversion and other costs incurred in bringing the inventories to their present						
	location and condition."						
	para 34 "When inventories are sold, the carrying amount of those inventories						
	shall be recognized as an expense in the period in which the related revenue is						
	recognized."						
MH	MH records inventory at its average cost.						
Current							
MH	No future changes are proposed upon transition to IFRS.						
Proposed							
OEB	The OEB does not include a reference to inventory valuation outside of a						
	reference to Purchased Gas Variance Accounts for gas utilities.						
AUC	AUC Rule 026 does not include a reference to inventory valuation outside of						
	capital inventories.						

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	Financial Reporting						
IFRS	As per IAS 1, para. 15, "Financial statements shall present fairly the financial						
	position, financial performance and cash flows of an entity. Fair presentation						
	requires the faithful representation of the effects of transactions, other events and						
	conditions in accordance with the definitions and recognition criteria for assets,						
	liabilities, income and expenses set out in the Framework. The application						
	IFRSs, with additional disclosure when necessary, is presumed to result in						
	financial statements that achieve a fair presentation."						
	para. 16 "An entity whose financial statements comply with IFRSs shall make						
	an explicit and unreserved statement of such compliance in the notes. An entity						
	shall not describe financial statements as complying with IFRSs unless they						
	comply with all the requirements of IFRSs."						
MH	MH's audited financial statements will be presented in accordance with CGAAP						
Current	for fiscal years 2010/11 and 2011/12.						
MH	MH's audited financial statements will be presented in accordance with IFRS						
Proposed	commencing in its fiscal 2012/13 fiscal year and forward.						
OEB	The OEB will require all electricity distributors and gas utilities that are require						
	to adopt IFRS by accounting standard setting bodies to report information to the						
	OEB using modified IFRS for regulatory accounting values and IFRS for audited						
	financial statements beginning with the year in which the electricity distributor or						
	gas utility has chosen to adopt IFRS for financial reporting. For those few						
	utilities not required to adopt IFRS for financial reporting, the OEB will require						
	that they report information to the Board using the form of generally accepted						
	accounting principles approved by their external auditors as being applicable to						
	them as regulated utilities.						
	The OEB will require all electricity distributors and gas utilities to continue to						
	report information to the OEB using Canadian GAAP until and including the						
	fiscal year prior to the year in which the electricity distributor or gas utility, as						
	applicable, has chosen to adopt IFRS for financial reporting.						
AUC	Please see Appendix 2 to this response for the financial reporting requirements of						
	the AUC per AUC 026.						

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	Application Reporting					
IFRS	IFRS does not include a standard that applies to the rate application reporting of					
	rate-regulated utilities.					
MH	MH's rate application financial statements will be presented in accordance with					
Current	CGAAP for fiscal years 2010/11 and 2011/12 and will reflect the transition to					
	IFRS commencing fiscal 2012/13 and forward.					
MH	MH is proposing that upon transition to IFRS that financial and regulatory					
Proposed	reporting will be aligned.					
OEB	Please see Appendix 1 for reporting requirements of Electric utilities.					
AUC	Please see Appendix 2 to this response for the application reporting requirements					
	of the AUC.					

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# OEB Report EB-2008-0408 Transition to International Financial Reporting Standards

## Regulatory Accounting Principles to Use in Electricity Cost of service Applications

For Electricity Distributors Adopting IFRS January 1, 2011 for Financial Reporting Purposes

	Rate Year for Which Application Made (Test Year)				
Year in which Application Made	2011	2012	2013	2014	2015
2010	CGAAP for H, B & T <b>or</b> CGAAP for H <b>and</b> MIFRS for B & T				
2011		CGAAP for H <b>and</b> MIFRS for H, B & T			
2012			MIFRS for H, B & T		
2013				MIFRS for H, B & T	
2014					MIFRS for H, B & T

### For Electricity Distributors Adopting IFRS January 1, 2012 for Financial Reporting Purposes

	Rate Year for Which Application Made (Test Year)						
Year in which Application Made	2011	2012	2013	2014	2015		
2010	CGAAP for H, B & T or CGAAP for H, B & T and MIFRS for T or CGAAP for H & B and MIFRS for B & T						
2011		CGAAP for H, B & T or CGAAP for H and MIFRS for B & T					
2012			CGAAP for H and MIFRS for H, B & T				
2013				MIFRS for H, B & T			
2014					MIFRS for H, B & T		

#### Legend:

H = Historic Year financial information (last full year

of actual historical information)

**B** = Bridge Year regulatory financial information

T = Test Year regulatory financial information

**CGAAP** - Canadian Generally Accepted Accounting Principles

MIFRS - International Financial Reporting Standards modified by the Ontario Energy Board for regulatory purposes consistent with the Report of the Board on Transition to IFRS, July, 2009, amended November, 2010 = Year in which both CGAAP and MIFRS information required

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Excerpt from AUC Rule 026 Accounting/Reporting standards to use for Alberta utilities

(4) Utilities that indicate to the Commission under subsection (2) that they will be adopting IFRS shall adhere to the following schedule

: Fiscal Year	Year Filed	Actual / Forecast	Accounting/Reporting Standard to Use
2009	2010	Actual	Existing Accounting Practice is to be used for regulatory
			filings with the AUC; Existing Canadian GAAP for financial statements
2010	2011	Actual	Existing Accounting Practice is to be followed for regulatory filings with the AUC; Existing Canadian GAAP for financial statements
2011	2012	Actual	This Rule is to be followed for regulatory filings with the AUC, complete with 2010 comparatives prepared using this Rule; IFRS is to be used for financial statements, including 2010 comparatives prepared under IFRS
2012 & beyond	2013 & beyond	Actual	This Rule is to be followed for regulatory filings with the AUC; IFRS is to be followed for financial statements
2009 (first year in test period)	Up to December 31, 2010	Forecast	Existing Accounting Practice is to be used
2010 (first year in test period)	Up to December 31, 2010	Forecast	Utilities may elect to file forecasts using Existing Accounting Practice, or, this Rule commencing with either the 2010 or 2011 forecast year according to the election made in subsection 2(2) of this Rule
2011 (first year in test period) & beyond	2010 & beyond	Forecast	This Rule is to be used for forecasts filed with the AUC

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