

PUB/MH II-38 (Revised Based on IFF12)

Reference: PUB/MH I-28 (f)

- a) **Please update the forecast for finance expense based on more current 2012 vintage external interest rate forecasts.**

ANSWER:

Please see the updated response to PUB/MH II-63.

PUB/MH II-39 b) (Revised based on IFF12)

Reference: PUB/MH I-30 (a) (c) Financial Targets

b) Please update the response in (c) to include figures for 2012/13 and 2013/14 based on IFF12 (Electric Operations)

ANSWER:

Please see the following tables, which have been updated to reflect IFF12.

Debt Ratio
Manitoba Hydro (Electric only)
(\$ millions)

Fiscal Year Ended	A	B	C	D	E	F	G	H	I	J	K	L	M	<u>(J-K+L-M)</u>
	Retained Earnings Consolidated	Retained Earnings Gas	Retained Earnings Subs	(A-B-C) Retained Earnings	Unamortized Customer Contributions Consolidated	Unamortized Customer Contributions Gas	(E-F) Unamortized Customer Contributions Electric	Accumulated Other Comprehensive Income	Non-Controlling Interest	Long-Term Debt	Sinking Fund Investment	Short-Term Debt	Short-Term Investments	<u>(D+G+H+I+J-K+L-M)</u> Debt:Equity Ratio
2005	870	25	2	843	296	32	264			6,998	562	59	9	0.85
2006	1,285	20	3	1,262	297	32	265			7,048	555	-	119	0.81
2007	1,407	21	8	1,378	298	31	267		15	7,136	630	148	1	0.80
2008	1,822	27	11	1,784	300	31	269	305	24	7,336	718	-	133	0.73
2009	2,076	36	12	2,028	296	30	266	(169)	39	7,953	666	100	159	0.77
2010	2,239	33	16	2,190	295	32	263	285	62	8,241	822	-	174	0.72
2011	2,389	40	21	2,328	295	33	262	367	87	8,350	282	-	70	0.72
2012	2,450	34	26	2,390	318	33	285	327	100	9,084	372	-	50	0.74
2013	2,510	36	33	2,442	341	35	336	299	99	9,941	320	51	-	0.75
2014	2,583	41	39	2,503	350	45	345	287	75	11,085	129	168	-	0.78

Calculation of Long Term Debt for input into Debt:Equity ratio

	a	b	c	d	e	f	g		
Fiscal Year Ended	MHEB Long-Term Debt	Gas Long-Term Debt	(a-b) Long-Term Debt	Write up/down to Sinking Fund	MHEB Current portion Long-Term Debt	Gas Current portion Long-Term Debt	(e-f) Current portion Long-Term Debt	(c+d+g) Long-Term Debt	
2005	7,048	248	6,800	45	156	3	153	6,998	
2006	7,051	190	6,861	127	118	58	60	7,048	
2007	6,822	208	6,614	149	405	32	373	7,136	
2008	7,218	233	6,985	-	353	2	351	7,336	
2009	7,668	141	7,527	-	519	93	426	7,953	
2010	8,228	297	7,931	-	310	-	310	8,241	
2011	8,617	297	8,320	-	30	-	30	8,350	
2012	9,101	235	8,866	-	281	63	218	9,084	
2013	9,428	295	9,133	-	808	-	808	9,941	
2014	11,199	325	10,874	-	211	-	211	11,085	

Interest Coverage
Electric
(\$ millions)

Fiscal Year Ended	A	B	C	D	E	F	G	H	I	(D+H+I)/(H+I)
	Consolidated Net Income	Gas Net Income	Subs Net Income	A-B-C Electric Net Income	Consolidated Finance Expense	Gas Finance Expense	Gas Corporate Allocation	E-F-G Electric Finance Expense *	Electric Capitalized Interest	Electric Interest Coverage
2005	136	(2)	1	137	502	17	12	473	33	1.27
2006	415	(5)	-	420	503	18	12	473	34	1.83
2007	122	1	2	119	506	22	12	472	40	1.23
2008	346	6	3	337	440	22	12	406	59	1.72
2009	266	9	1	256	471	20	12	439	75	1.50
2010	163	(1)	4	160	410	19	12	379	102	1.33
2011	150	7	5	138	425	18	12	395	139	1.26
2012	61	(6)	5	62	423	19	12	392	171	1.11
2013	60	2	6	53	489	18	12	452	141	1.09
2014	72	6	6	60	481	17	12	444	161	1.10

Capital Coverage Ratio Excluding Major Generation Electric (\$ millions)							
	A	B	C	D	E	F	C/F
Fiscal Year Ended	Consolidated Funds from Operations	Gas Funds from Operations	A-B Electric Funds from Operations *	Consolidated Capital Expenditures	Gas Capital Expenditures	D-E Electric Capital Expenditures	Electric Capital Coverage
2005	433	27	406	360	23	337	1.20
2006	710	(2)	712	310	27	283	2.52
2007	443	22	421	405	29	376	1.12
2008	633	34	599	391	28	363	1.65
2009	688	35	653	388	30	358	1.82
2010	589	61	528	439	25	414	1.28
2011	595	45	550	477	27	450	1.22
2012	567	49	518	503	31	472	1.10
2013			472	470	36	434	1.09
2014			486	581	38	543	0.89

PUB/MH II-40 (Revised based on IFF12)

Reference: PUB/MH I-30 (c) PUB/MH I-61 (b) & PUB/MH I-78 (b)

- a) **Please refile the analysis in PUB/MH I-78 (b) assuming the continuation of rate-regulated accounting based on IFF12, (reflecting the delay in the implementation of IFRS until 2014/15) and the continued use of Average Service Life for depreciation purposes for rate setting. Please provide the electric financial ratios.**

ANSWER:

Please see the following scenario for electric operations only, which assumes that rate – regulated accounting would continue to be allowed under IFRS commencing in 2014/15 until the end of the forecast period. This scenario also assumes the continued use of Average Service Life and includes Net Salvage. It should be noted, however, that with the adoption of IFRS and the required removal of net salvage, if Manitoba Hydro continued to use ASL it would also be necessary to increase the degree of componentization – which would bring the ASL and ELG depreciation methodologies closer together.

ELECTRIC OPERATIONS (MH12)
PROJECTED OPERATING STATEMENT
PUB-MH II-40(a) IFF12 - Rate Regulated Accounting with ASL and Net Salvage
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REVENUES										
General Consumers										
at approved rates	1,331	1,361	1,374	1,390	1,404	1,424	1,447	1,462	1,485	1,506
additional*	0	48	104	165	228	297	371	447	531	619
Extraprovincial	357	344	343	380	406	435	441	464	711	839
Other	14	15	15	15	15	16	16	16	17	17
	<u>1,702</u>	<u>1,768</u>	<u>1,836</u>	<u>1,950</u>	<u>2,054</u>	<u>2,172</u>	<u>2,274</u>	<u>2,390</u>	<u>2,743</u>	<u>2,981</u>
EXPENSES										
Operating and Administrative	455	471	515	528	539	564	576	593	616	629
Finance Expense	452	444	490	523	584	655	764	778	998	1,093
Depreciation and Amortization	399	430	437	456	477	515	562	578	654	697
Water Rentals and Assessments	117	116	112	112	112	112	112	113	121	126
Fuel and Power Purchased	143	166	179	191	206	221	230	231	253	264
Capital and Other Taxes	88	96	102	111	120	129	136	142	149	158
Corporate Allocation	9	9	9	9	9	9	9	9	9	9
	<u>1,664</u>	<u>1,732</u>	<u>1,843</u>	<u>1,930</u>	<u>2,046</u>	<u>2,204</u>	<u>2,389</u>	<u>2,444</u>	<u>2,801</u>	<u>2,976</u>
Non-controlling Interest	14	24	21	16	13	10	6	3	4	(3)
Net Income	<u>53</u>	<u>60</u>	<u>14</u>	<u>36</u>	<u>20</u>	<u>(21)</u>	<u>(109)</u>	<u>(51)</u>	<u>(55)</u>	<u>2</u>
* Additional General Consumers Revenue										
Percent Increase	0.00%	3.50%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	0.00%	3.50%	7.59%	11.84%	16.26%	20.85%	25.62%	30.58%	35.74%	41.10%
Financial Ratios										
Equity	25%	22%	18%	16%	14%	13%	12%	11%	10%	9%
Interest Coverage	1.09	1.10	1.02	1.05	1.02	0.98	0.90	0.96	0.96	1.00
Capital Coverage	1.09	0.89	0.82	0.96	1.28	1.45	1.18	1.64	1.55	1.68

ELECTRIC OPERATIONS (MH12)
PROJECTED OPERATING STATEMENT
PUB-MH II-40(a) IFF12 - Rate Regulated Accounting with ASL and Net Salvage
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
REVENUES										
General Consumers at approved rates	1,529	1,552	1,575	1,598	1,621	1,644	1,669	1,693	1,717	1,741
additional*	713	814	921	1,035	1,155	1,283	1,419	1,564	1,716	1,878
Extraprovincial	873	863	851	937	1,209	1,288	1,304	1,312	1,331	1,341
Other	17	18	18	18	19	19	19	20	20	21
	3,133	3,246	3,366	3,588	4,003	4,234	4,411	4,588	4,784	4,980
EXPENSES										
Operating and Administrative	644	658	672	704	720	736	753	766	782	799
Finance Expense	1,083	1,081	1,071	1,188	1,434	1,616	1,580	1,535	1,539	1,469
Depreciation and Amortization	708	717	725	774	863	928	936	948	980	998
Water Rentals and Assessments	128	127	126	134	147	151	151	151	152	153
Fuel and Power Purchased	278	292	318	281	277	291	304	318	328	341
Capital and Other Taxes	166	175	181	186	189	190	193	194	199	198
Corporate Allocation	9	9	9	9	9	9	9	8	7	7
	3,014	3,059	3,103	3,276	3,639	3,920	3,927	3,920	3,986	3,965
Non-controlling Interest	(5)	(10)	(13)	(9)	(11)	(14)	(16)	(20)	(22)	(25)
Net Income	113	177	251	303	353	300	468	648	776	991
* Additional General Consumers Revenue Percent Increase	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	46.68%	52.47%	58.49%	64.75%	71.26%	78.03%	85.06%	92.37%	99.97%	107.86%
Financial Ratios										
Equity	9%	10%	10%	11%	12%	13%	14%	16%	19%	22%
Interest Coverage	1.08	1.12	1.16	1.18	1.21	1.18	1.28	1.40	1.49	1.66
Capital Coverage	1.70	1.80	1.97	2.28	2.88	2.54	2.65	2.83	2.94	3.88

**ELECTRIC OPERATIONS (MH12)
PROJECTED BALANCE SHEET
PUB-MH II-40(a) IFF12 - Rate Regulated Accounting with ASL and Net Salvage
(In Millions of Dollars)**

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ASSETS										
Plant in Service	15,374	16,435	17,104	18,255	18,807	22,348	22,781	25,825	29,899	30,432
Accumulated Depreciation	(5,173)	(5,536)	(5,908)	(6,303)	(6,731)	(7,206)	(7,732)	(8,274)	(8,894)	(9,560)
Net Plant in Service	10,201	10,899	11,196	11,952	12,076	15,142	15,049	17,551	21,005	20,872
Construction in Progress	2,108	2,878	4,198	5,128	6,794	5,439	6,879	5,422	3,038	4,821
Current and Other Assets	1,869	1,735	1,391	1,578	1,800	2,027	1,844	1,984	2,059	1,725
Goodwill and Intangible Assets	180	165	150	134	123	113	105	98	92	88
Regulated Assets	231	225	215	203	191	179	169	158	148	141
	14,590	15,902	17,151	18,996	20,984	22,901	24,046	25,214	26,342	27,645
LIABILITIES AND EQUITY										
Long-Term Debt	9,428	11,199	12,741	14,614	16,304	18,077	19,772	20,739	21,862	23,412
Current and Other Liabilities	2,086	1,569	1,743	1,723	2,034	2,222	1,792	2,058	2,135	1,906
Contributions in Aid of Construction	336	345	350	355	359	369	375	382	389	396
Retained Earnings	2,442	2,502	2,459	2,494	2,514	2,493	2,384	2,333	2,278	2,281
Accumulated Other Comprehensive Income	299	287	(142)	(189)	(228)	(259)	(278)	(298)	(321)	(349)
	14,590	15,902	17,151	18,996	20,984	22,901	24,046	25,214	26,342	27,645

ELECTRIC OPERATIONS (MH12)
PROJECTED BALANCE SHEET
PUB-MH II-40(a) IFF12 - Rate Regulated Accounting with ASL and Net Salvage
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
ASSETS										
Plant in Service	30,962	31,525	32,212	37,906	43,040	44,544	45,284	45,838	47,824	48,551
Accumulated Depreciation	(10,239)	(10,930)	(11,632)	(12,384)	(13,225)	(14,133)	(15,050)	(15,979)	(16,940)	(17,921)
Net Plant in Service	20,723	20,594	20,580	25,522	29,815	30,411	30,235	29,859	30,884	30,631
Construction in Progress	6,576	8,048	9,200	5,077	1,364	737	1,070	1,513	464	539
Current and Other Assets	1,811	2,112	2,402	2,212	2,499	3,009	3,278	3,624	3,731	4,901
Goodwill and Intangible Assets	85	83	82	82	81	80	79	78	77	76
Regulated Assets	133	128	123	118	112	107	104	101	100	100
	29,327	30,965	32,387	33,011	33,870	34,344	34,765	35,176	35,257	36,247
LIABILITIES AND EQUITY										
Long-Term Debt	25,414	27,017	27,770	28,372	28,774	29,115	28,866	28,169	28,158	27,731
Current and Other Liabilities	1,482	1,332	1,742	1,453	1,550	1,375	1,570	2,020	1,329	1,746
Contributions in Aid of Construction	403	411	418	426	433	441	449	457	466	474
Retained Earnings	2,394	2,571	2,822	3,125	3,478	3,778	4,246	4,894	5,670	6,661
Accumulated Other Comprehensive Income	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)
	29,327	30,965	32,387	33,011	33,870	34,344	34,765	35,176	35,257	36,247

ELECTRIC OPERATIONS (MH12)
PROJECTED CASH FLOW STATEMENT
PUB-MH II-40(a) IFF12 - Rate Regulated Accounting with ASL and Net Salvage
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
OPERATING ACTIVITIES										
Cash Receipts from Customers	1,692	1,768	1,836	1,950	2,054	2,172	2,274	2,390	2,743	2,981
Cash Paid to Suppliers and Employees	(782)	(822)	(882)	(914)	(948)	(994)	(1,021)	(1,045)	(1,103)	(1,138)
Interest Paid	(466)	(476)	(508)	(554)	(606)	(698)	(813)	(814)	(1,048)	(1,137)
Interest Received	28	17	24	26	31	39	41	38	35	32
	472	486	471	508	531	519	481	570	627	738
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1,036	1,970	1,760	2,190	2,170	2,590	1,990	1,580	1,790	1,990
Sinking Fund Withdrawals	129	393	102	26	-	16	416	187	269	676
Retirement of Long-Term Debt	(180)	(808)	(176)	(312)	(347)	(530)	(829)	(306)	(635)	(679)
Other	(42)	(7)	(17)	(19)	(17)	(13)	(24)	(13)	(34)	(9)
	943	1,548	1,670	1,886	1,807	2,063	1,553	1,448	1,390	1,977
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1,381)	(1,922)	(2,057)	(2,110)	(2,240)	(2,198)	(1,886)	(1,687)	(1,819)	(2,320)
Sinking Fund Payment	(107)	(208)	(124)	(188)	(166)	(227)	(219)	(224)	(248)	(343)
Other	(21)	(20)	(21)	(20)	(32)	(42)	(28)	(28)	(33)	(38)
	(1,509)	(2,151)	(2,202)	(2,318)	(2,438)	(2,467)	(2,133)	(1,939)	(2,100)	(2,700)
Net Increase (Decrease) in Cash	(94)	(117)	(61)	75	(100)	115	(99)	78	(83)	15
Cash at Beginning of Year	43	(51)	(168)	(230)	(154)	(254)	(139)	(238)	(160)	(243)
Cash at End of Year	(51)	(168)	(230)	(154)	(254)	(139)	(238)	(160)	(243)	(228)

ELECTRIC OPERATIONS (MH12)
PROJECTED CASH FLOW STATEMENT
PUB-MH II-40(a) IFF12 - Rate Regulated Accounting with ASL and Net Salvage
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPERATING ACTIVITIES										
Cash Receipts from Customers	3,133	3,246	3,366	3,588	4,003	4,234	4,411	4,588	4,784	4,980
Cash Paid to Suppliers and Employees	(1,174)	(1,208)	(1,251)	(1,256)	(1,281)	(1,312)	(1,342)	(1,367)	(1,395)	(1,422)
Interest Paid	(1,107)	(1,099)	(1,101)	(1,229)	(1,479)	(1,678)	(1,664)	(1,628)	(1,648)	(1,553)
Interest Received	18	19	29	34	42	57	73	81	92	73
	869	959	1,044	1,137	1,285	1,301	1,478	1,673	1,833	2,078
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1,960	1,590	1,190	580	390	390	(10)	(40)	(10)	(10)
Sinking Fund Withdrawals	156	-	-	450	-	-	60	250	700	13
Retirement of Long-Term Debt	(432)	-	-	(450)	-	-	(60)	(220)	(700)	(13)
Other	(1)	(0)	(1)	(1)	(0)	0	2	2	3	(16)
	1,683	1,590	1,189	579	390	390	(8)	(8)	(7)	(26)
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(2,288)	(2,038)	(1,842)	(1,572)	(1,420)	(876)	(1,072)	(996)	(936)	(801)
Sinking Fund Payment	(249)	(268)	(294)	(317)	(315)	(332)	(348)	(357)	(359)	(338)
Other	(29)	(32)	(25)	(25)	(28)	(26)	(26)	(26)	(26)	(26)
	(2,565)	(2,338)	(2,161)	(1,914)	(1,762)	(1,234)	(1,446)	(1,379)	(1,321)	(1,165)
Net Increase (Decrease) in Cash	(13)	210	72	(198)	(88)	458	23	286	505	887
Cash at Beginning of Year	(228)	(241)	(31)	42	(157)	(244)	213	237	523	1,027
Cash at End of Year	(241)	(31)	42	(157)	(244)	213	237	523	1,027	1,915

PUB/MH II-40

Reference: PUB/MH I-30 (c) PUB/MH I-61 (b) & PUB/MH I-78 (b)

- c) **Please provide a comparison of the impacts on financial results and financial targets for 2012/13 through 2014/15 comparing IFF12 from part (a) with IFF11-2 per the application.**

ANSWER:

PUB-MH II-40(a) IFF12 - Rate Regulated Accounting with ASL and Net Salvage

	2013	2014	2015
Equity	25%	22%	18%
Interest Coverage	1.09	1.10	1.02
Capital Coverage	1.09	0.89	0.82

IFF11-2 Financial Ratios

	2012	2013	2014	2015
Equity	26%	24%	19%	17%
Interest Coverage	1.12	1.03	1.11	1.09
Capital Coverage	1.04	1.07	1.13	1.15

PUB/MH II-60 (Revised Based on IFF12)

Reference: PUB/MH I-64 (d) & (h)

- a) Please update the analysis in (d) to include years 2003/04 through 2013/14, reflecting the delay and implementation of IFRS and provide three tables; a schedule of total corporate costs, cost capitalize by business unit, and the percentage capitalized by business unit in each year.

ANSWER:

The following schedules have been updated to reflect IFF12.

MANITOBA HYDRO COSTS CAPITALIZED BY BUSINESS UNIT										(000's)
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Forecast</u>	<u>Forecast</u>
President & CEO	\$ 828	\$ 886	\$ 1,022	\$ 841	\$ 948	\$ 496	\$ 331	\$ 555	\$ 675	\$ 689
Corporate Relations	1,663	2,350	3,249	3,449	4,364	4,872	4,934	5,301	4,630	4,723
Finance & Administration	12,734	13,271	9,028	10,559	10,494	10,794	12,482	12,438	12,297	12,543
Power Supply	30,662	31,364	35,709	41,181	45,191	54,629	63,199	74,028	71,993	73,433
Transmission	40,847	44,317	43,789	50,131	53,067	61,254	67,377	72,554	67,537	68,887
Customer Services & Distribution	64,861	69,643	74,739	76,102	80,943	82,373	84,995	92,995	79,432	81,021
Customer Care & Marketing	6,135	8,628	9,456	10,069	10,164	9,879	10,226	10,780	9,299	9,485
	\$ 157,730	\$ 170,459	\$ 176,992	\$ 192,331	\$ 205,169	\$ 224,297	\$ 243,545	\$ 268,651	\$ 245,865	\$ 250,782

Table 1 provides a schedule of total corporate costs prior to capitalization. In addition, amounts allocated to Centra Gas have been deducted in order to provide total electric costs before capitalization. Amounts do not include costs such as material and contracted services direct charged to capital projects.

The combined Table 2 and 3 provides the costs capitalized through activity charges by business unit and the percentage of total costs capitalized. Amounts capitalized through overhead have also been provided.

MANTOBA HYDRO

TOTAL COSTS EXCLUDING AMOUNTS CAPITALIZED (Table 1)

<i>(in thousands of \$)</i>	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast
President & CEO	\$ 21,777	\$ 23,009	\$ 24,228	\$ 23,804	\$ 25,178	\$ 32,074	\$ 29,166	\$ 28,883	\$ 29,368	\$ 29,955
Corporate Relations	5,166	7,846	8,468	8,694	9,884	9,569	9,673	8,326	9,122	9,304
Finance & Administration	103,353	106,286	108,054	110,079	114,215	119,707	119,010	119,882	126,640	129,173
Power Supply	144,095	148,560	159,068	168,790	187,374	201,702	213,319	229,111	249,975	254,975
Transmission	118,826	122,127	127,292	133,302	144,155	153,556	157,871	161,816	172,298	175,744
Customer Services & Distribution	156,967	166,607	166,831	174,475	184,705	193,442	191,701	203,040	209,790	213,986
Customer Care & Marketing	48,495	50,921	52,347	48,540	49,105	52,275	51,672	54,483	61,048	62,269
Business Unit Total (gross of capital activities)	598,679	625,356	646,289	667,685	714,616	762,324	772,412	805,540	858,241	875,406
Motor Vehicle Chargeout	(20,219)	(22,089)	(22,117)	(22,010)	(24,266)	(24,352)	(17,933)	(16,843)	(11,706)	(11,940)
Payroll Tax	(7,602)	(8,136)	(8,344)	(8,774)	(9,679)	(10,070)	(10,458)	(11,137)	(11,494)	(11,724)
Corporate Allocations & Adjustments	(1,110)	1,099	21	1,686	9,787	(4,952)	4,450	9,595	11,716	19,515
Total Corporate Costs	569,748	596,230	615,849	638,587	690,458	722,950	748,471	787,156	846,757	871,257
Operating & Administration Charged to Centra	(55,232)	(53,085)	(53,505)	(56,270)	(59,803)	(60,951)	(60,644)	(62,117)	(67,300)	(68,800)
Total Electric Costs	\$ 514,516	\$ 543,145	\$ 562,344	\$ 582,317	\$ 630,654	\$ 661,999	\$ 687,826	\$ 725,039	\$ 779,457	\$ 802,457

MH Exhibit #40
2012/13 & 2013/14 Electric General Rate Application

MANITOBA HYDRO

COSTS CAPITALIZED (Table 2 & 3 combined)

(in thousands of \$)

	2004/05	% of	2005/06	% of	2006/07	% of	2007/08	% of	2008/09	% of	2009/10	% of	2010/11	% of	2011/12	% of	2012/13	% of	2013/14	% of
	Actual	Corp. Costs	Actual	Corp. Costs	Actual	Corp. Costs	Actual	Corp. Costs	Actual	Corp. Costs	Actual	Corp. Costs	Actual	Corp. Costs	Actual	Corp. Costs	Forecast	Corp. Costs	Forecast	Corp. Costs
Total Corporate Costs	\$ 569,748		\$ 596,230		\$ 615,849		\$ 638,587		\$ 690,458		\$ 722,950		\$ 748,471		\$ 787,156		\$ 846,757		\$ 871,257	
President & CEO	828	0.1%	886	0.1%	1,022	0.2%	841	0.1%	948	0.1%	496	0.1%	331	0.0%	555	0.1%	675	0.1%	689	0.1%
Corporate Relations	1,663	0.3%	2,350	0.4%	3,249	0.5%	3,449	0.5%	4,364	0.6%	4,872	0.7%	4,934	0.7%	5,301	0.7%	4,630	0.5%	4,723	0.5%
Finance & Administration	12,734	2.2%	13,271	2.2%	9,028	1.5%	10,559	1.7%	10,494	1.5%	10,794	1.5%	12,482	1.7%	12,438	1.6%	12,297	1.5%	12,543	1.4%
Power Supply	30,662	5.4%	31,364	5.3%	35,709	5.8%	41,181	6.4%	45,191	6.5%	54,629	7.6%	63,199	8.4%	74,028	9.4%	71,993	8.5%	73,433	8.4%
Transmission	40,847	7.2%	44,317	7.4%	43,789	7.1%	50,131	7.9%	53,067	7.7%	61,254	8.5%	67,377	9.0%	72,554	9.2%	67,537	8.0%	68,887	7.9%
Customer Services & Distribution	64,861	11.4%	69,643	11.7%	74,739	12.1%	76,102	11.9%	80,943	11.7%	82,373	11.4%	84,995	11.4%	92,995	11.8%	79,432	9.4%	81,021	9.3%
Customer Care & Marketing	6,135	1.1%	8,628	1.4%	9,456	1.5%	10,069	1.6%	10,164	1.5%	9,879	1.4%	10,226	1.4%	10,780	1.4%	9,299	1.1%	9,485	1.1%
Capital Order Activities	\$ 157,730		\$ 170,459		\$ 176,992		\$ 192,331		\$ 205,169		\$ 224,297		\$ 243,545		\$ 268,651		\$ 245,865		\$ 250,782	
Capitalized Overhead	\$ 58,174	10.2%	\$ 62,028	10.4%	\$ 61,887	10.0%	\$ 67,289	10.5%	\$ 61,198	8.9%	\$ 60,151	8.3%	\$ 47,336	6.3%	\$ 53,084	6.7%	\$ 78,284	9.2%	\$ 81,021	9.3%

PUB/MH II-60 (Revised Based on IFF12)

Reference: PUB/MH I-64 (d) & (h)

- b) Please refile the analysis in (h) reflecting IFF 12 and the delay of implementation of IFR S until 2014/15.**

ANSWER:

Please see the Operating, Maintenance and Administrative Costs by Cost Element schedule adjusted to reconcile with the OM&A reflected in IFF12.

MH Exhibit #40
2012/13 & 2013/14 Electric General Rate Application

MANITOBA HYDRO
OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS BY COST ELEMENT

(In thousands of \$)	2009/10	2010/11	2011/12	2012/13	2013/14	Average Annual
	Actual	Actual	Actual	Forecast	Forecast	% Inc/(Dec)
Wages, Salaries	\$ 407,988	\$ 425,158	\$ 451,925	\$ 476,570	\$ 486,101	4.5%
Overtime	50,307	50,704	54,987	56,005	57,126	3.3%
Employee Benefits	83,013	95,376	104,444	125,549	130,535	12.1%
Employee Safety & Training	4,284	3,863	3,909	4,914	5,013	4.8%
Travel	32,435	32,594	31,266	32,405	33,053	0.5%
Motor Vehicle	24,281	24,436	28,676	27,452	28,001	3.9%
Materials & Tools	26,897	28,105	26,663	27,173	27,716	0.8%
Consulting & Professional Fees	14,814	11,157	10,250	11,639	11,872	-4.3%
Construction & Maintenance Services	20,109	22,657	21,228	18,706	19,080	-0.9%
Building & Property Services	22,931	21,944	21,387	22,399	22,847	0.0%
Equipment Maintenance & Rentals	14,379	14,165	13,388	14,476	14,766	0.8%
Consumer Services	5,798	5,086	5,365	5,284	5,389	-1.6%
Collection Costs	4,599	4,497	4,035	4,347	4,434	-0.7%
Customer & Public Relations	8,155	7,905	8,093	6,849	6,986	-3.5%
Sponsored Memberships	1,325	1,917	1,608	1,081	1,103	-0.6%
Office & Administration	15,320	14,316	14,277	15,263	15,569	0.5%
Computer Services	983	1,003	861	909	927	-1.1%
Communication Systems	1,772	1,678	1,683	1,683	1,717	-0.7%
Research & Development Costs	3,952	3,651	2,797	3,509	3,579	-0.9%
Miscellaneous Expense	1,190	1,264	2,032	1,213	1,237	7.2%
Contingency Planning	-	-	-	(883)	(1,019)	
Operating Expense Recovery	(21,580)	(23,004)	(21,716)	(9,787)	(9,983)	-13.0%
Total Costs	722,951	748,471	787,156	846,758	866,049	4.6%
Capital Order Activities	(224,298)	(243,545)	(268,651)	(245,865)	(250,782)	3.1%
Capitalized Overhead	(60,151)	(47,336)	(53,084)	(78,284)	(81,021)	10.5%
Operating and Administration Charged to Centra	(60,951)	(60,644)	(62,117)	(67,300)	(68,800)	3.1%
Wuskatim GS for Full Year In-Service	-	-	-	-	5,208	
OM&A Attributable to Electric Operations	\$ 377,551	\$ 396,946	\$ 403,304	\$ 455,309	\$ 470,654	
Less:						
Accounting Changes	11,240	30,910	34,973	75,411	78,318	
Wuskwatim				5,589	10,797	
OM&A Attributable to Electric Operations after adjusting for subsidiaries, accounting changes and Wuskwatim	\$ 366,311	\$ 366,036	\$ 368,331	\$ 374,309	\$ 381,539	

PUB/MH II-63 (Revised Based on IFF12)

Reference: PUB/MH I-66 (a)

Please refile the schedule for the years 2004/05 through 2033 based on IFF12.

ANSWER:

Please see table on the following page.

MH Exhibit #40
2012/13 & 2013/14 Electric General Rate Application

MANITOBA HYDRO
FINANCE EXPENSE (in \$ '000)
IFF12 Update PUB/MH II - 63

IFF12 Forecast

	2003/04 Actual	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08 Actual	2008/09 Actual	2009/10 Actual	2010/11 Actual	2011/12 Actual	2012/13 Forecast	2013/14 Forecast
Interest on Short & Long-Term Debt (Note 1)											
Gross Interest	\$ 489,978	\$ 485,696	\$ 492,656	\$ 496,204	\$ 448,106	\$ 490,046	\$ 447,346	\$ 476,448	\$ 492,561	\$ 523,352	\$ 514,878
Provincial Guarantee Fee	66,844	67,801	65,905	67,997	69,865	70,360	72,274	76,697	82,182	90,433	99,391
Amortization of (Premiums), Discounts, and Transaction Costs	(14,375)	(9,326)	(8,802)	(8,658)	(11,054)	(12,322)	(11,262)	2,872	255	108	143
Intercompany Interest Receivable	(15,259)	(15,392)	(16,470)	(16,827)	(19,774)	(18,182)	(15,737)	(16,224)	(17,318)	(18,408)	(18,314)
Total Interest on Short & Long-Term Debt	527,188	528,778	533,289	538,716	487,143	529,903	492,621	539,794	557,680	595,485	596,098
Interest Earned on Sinking Fund	(43,028)	(27,656)	(30,640)	(28,535)	(30,180)	(24,920)	(23,702)	(17,068)	(9,828)	(10,147)	243
Interest Allocated to Construction	(31,564)	(32,683)	(34,496)	(47,071)	(60,015)	(74,493)	(98,121)	(135,517)	(167,398)	(141,474)	(161,418)
Corporate Allocation	(16,830)	(16,763)	(16,809)	(17,141)	(17,483)	(17,543)	(17,896)	(19,112)	(19,174)	(19,128)	(19,128)
Other Amortization	17,035	16,166	17,015	21,170	21,331	20,116	20,365	19,946	23,765	27,580	28,461
Total Finance Expense	\$ 452,801	\$ 467,843	\$ 468,359	\$ 467,139	\$ 400,796	\$ 433,063	\$ 373,267	\$ 388,043	\$ 385,044	\$ 452,316	\$ 444,256

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.

	2014/15 Forecast	2015/16 Forecast	2016/17 Forecast	2017/18 Forecast	2018/19 Forecast	2019/20 Forecast	2020/21 Forecast	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast
Interest on Short & Long-Term Debt (Note 1)											
Gross Interest	\$ 586,798	\$ 665,733	\$ 783,781	\$ 874,607	\$ 958,479	\$ 1,022,539	\$ 1,087,613	\$ 1,156,144	\$ 1,229,397	\$ 1,320,933	\$ 1,390,714
Provincial Guarantee Fee	111,738	128,297	146,598	166,299	186,073	199,079	211,302	223,284	235,833	250,795	267,901
Amortization of (Premiums), Discounts, and Transaction Costs	240	1,460	62	(47)	(59)	(279)	1,096	1,141	649	551	1,317
Intercompany Interest Receivable	(19,811)	(22,785)	(22,519)	(24,543)	(26,284)	(27,682)	(28,960)	(30,421)	(31,741)	(34,887)	(36,379)
Total Interest on Short & Long-Term Debt	678,965	772,705	907,922	1,016,316	1,118,209	1,193,657	1,271,051	1,350,148	1,434,138	1,537,392	1,623,553
Interest Earned on Sinking Fund	(7,600)	(9,267)	(14,769)	(25,599)	(27,937)	(26,156)	(23,184)	(21,576)	(9,159)	(11,610)	(22,231)
Interest Allocated to Construction	(187,934)	(247,306)	(314,851)	(341,452)	(329,846)	(392,392)	(251,768)	(233,288)	(339,219)	(440,553)	(525,618)
Corporate Allocation	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)	(19,128)
Other Amortization	27,605	27,182	26,787	26,357	25,889	24,739	24,154	20,637	20,039	19,978	19,904
Total Finance Expense	\$ 491,908	\$ 524,186	\$ 585,961	\$ 656,494	\$ 767,187	\$ 780,720	\$ 1,001,125	\$ 1,096,793	\$ 1,086,671	\$ 1,086,079	\$ 1,076,480

	2025/26 Forecast	2026/27 Forecast	2027/28 Forecast	2028/29 Forecast	2029/30 Forecast	2030/31 Forecast	2031/32 Forecast
Interest on Short & Long-Term Debt (Note 1)							
Gross Interest	\$ 1,434,713	\$ 1,453,545	\$ 1,468,790	\$ 1,470,699	\$ 1,454,410	\$ 1,430,172	\$ 1,341,959
Provincial Guarantee Fee	278,280	281,250	285,728	286,594	287,890	285,279	278,169
Amortization of (Premiums), Discounts, and Transaction Costs	630	1,563	530	619	2,851	1,757	3,055
Intercompany Interest Receivable	(37,214)	(38,245)	(39,195)	(40,053)	(40,770)	(41,777)	(42,323)
Total Interest on Short & Long-Term Debt	1,676,409	1,698,113	1,715,853	1,717,859	1,704,381	1,675,431	1,580,860
Interest Earned on Sinking Fund	(27,823)	(36,722)	(52,824)	(69,576)	(78,060)	(90,103)	(72,246)
Interest Allocated to Construction	(456,609)	(221,926)	(41,243)	(59,786)	(81,103)	(35,436)	(28,085)
Corporate Allocation	(19,128)	(19,128)	(19,128)	(19,128)	(18,220)	(17,500)	(17,500)
Other Amortization	19,717	19,651	19,572	19,486	19,389	19,274	19,150
Total Finance Expense	\$ 1,192,566	\$ 1,439,988	\$ 1,622,230	\$ 1,588,855	\$ 1,546,387	\$ 1,551,666	\$ 1,482,179

PUB/MH II-64 (Revised based on IFF12)

Reference: PUB/MH I-67 (b)

Please provide a comparative schedule 5.6.0 for the two test years based on IFF12 versus IFFII-2.

ANSWER:

Please see the attached schedule.

MH Exhibit #40
2012/13 & 2013/14 Electric General Rate Application

PUB/MH II-64 IFF12 Update

**MANITOBA HYDRO
FINANCE EXPENSE**

Schedule 5.6.0 as Filed
(000's)

	<u>2009/10</u> <u>Actual</u>	<u>2010/11</u> <u>Actual</u>	<u>2011/12</u> <u>Forecast</u>	<u>2012/13</u> <u>Forecast</u>	<u>2013/14</u> <u>Forecast</u>
Interest on Short & Long-Term Debt					
Gross Interest	\$ 447,346	\$ 476,448	\$ 491,229	\$ 513,478	\$ 550,766
Provincial Guarantee Fee	72,274	76,697	82,181	90,966	99,723
Amortization of (Premiums), Discounts, and Transaction Costs	(11,262)	2,872	276	396	430
Intercompany Interest Receivable	(15,737)	(16,224)	(17,723)	(15,072)	(15,404)
Total Interest on Short & Long-Term Debt	<u>492,621</u>	<u>539,794</u>	<u>555,963</u>	<u>589,768</u>	<u>635,515</u>
Interest Earned on Sinking Fund	(23,702)	(17,068)	(9,800)	(10,553)	(9,711)
Interest Allocated to Construction	(98,121)	(135,517)	(166,518)	(144,805)	(178,085)
Corporate Allocation	(17,896)	(19,112)	(19,128)	(19,128)	(19,128)
Other Amortization	20,365	19,946	24,797	24,359	23,053
Total Finance Expense	<u>\$ 373,267</u>	<u>\$ 388,043</u>	<u>\$ 385,314</u>	<u>\$ 439,641</u>	<u>\$ 451,643</u>

**MANITOBA HYDRO
FINANCE EXPENSE**

Schedule 5.6.0 - IFF12 Update
(000's)

	<u>2009/10</u> <u>Actual</u>	<u>2010/11</u> <u>Actual</u>	<u>2011/12</u> <u>Actual</u>	<u>2012/13</u> <u>Forecast</u>	<u>2013/14</u> <u>Forecast</u>
Interest on Short & Long-Term Debt					
Gross Interest	\$ 447,346	\$ 476,448	\$ 492,561	\$ 523,353	\$ 514,878
Provincial Guarantee Fee	72,274	76,697	82,182	90,433	99,391
Amortization of (Premiums), Discounts, and Transaction Costs	(11,262)	2,872	255	108	143
Intercompany Interest Receivable	(15,737)	(16,224)	(17,318)	(18,409)	(18,314)
Total Interest on Short & Long-Term Debt	<u>492,621</u>	<u>539,794</u>	<u>557,680</u>	<u>595,485</u>	<u>596,098</u>
Interest Earned on Sinking Fund	(23,702)	(17,068)	(9,828)	(10,147)	243
Interest Allocated to Construction	(98,121)	(135,517)	(167,398)	(141,474)	(161,418)
Corporate Allocation	(17,896)	(19,112)	(19,174)	(19,128)	(19,128)
Other Amortization	20,365	19,946	23,765	27,580	28,461
Total Finance Expense	<u>\$ 373,267</u>	<u>\$ 388,043</u>	<u>\$ 385,044</u>	<u>\$ 452,316</u>	<u>\$ 444,256</u>

**MANITOBA HYDRO
FINANCE EXPENSE**

Schedule 5.6.0 - Difference IFF12 to IFF11-2
(000's)

	<u>2009/10</u> <u>Actual</u>	<u>2010/11</u> <u>Actual</u>	<u>2011/12</u> <u>Actual</u>	<u>2012/13</u> <u>Forecast</u>	<u>2013/14</u> <u>Forecast</u>
Interest on Short & Long-Term Debt					
Gross Interest	\$ -	\$ -	\$ 1,332	\$ 9,875	\$ (35,888)
Provincial Guarantee Fee	-	-	1	(533)	(332)
Amortization of (Premiums), Discounts, and Transaction Costs	-	-	(21)	(288)	(287)
Intercompany Interest Receivable	-	-	405	(3,337)	(2,910)
Total Interest on Short & Long-Term Debt	<u>-</u>	<u>-</u>	<u>1,717</u>	<u>5,717</u>	<u>(39,417)</u>
Interest Earned on Sinking Fund	-	-	(28)	406	9,954
Interest Allocated to Construction	-	-	(880)	3,331	16,667
Corporate Allocation	-	-	(46)	-	-
Other Amortization	-	-	(1,032)	3,221	5,408
Total Finance Expense	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (270)</u>	<u>\$ 12,675</u>	<u>\$ (7,387)</u>

PUB/MH II-91(Revised based on IFF12)

Reference: PUB/MH I-133 (b) – 7 Year Drought Scenario

- a) **Given the indicated time problems, please provide by October 31, 2012 the requested 7-year drought scenario starting in 2021/22:**
- i. Recommended Plan**
 - ii. Alternative Plan 1 (with 250 MW-MP interconnection)**
 - iii. Alternative Plan 2 (CCCT w/o new interconnection)**

ANSWER:

Manitoba Hydro does not have available an analysis for a 7 year drought commencing in 2021/22 corresponding to IFF11-2 assumptions. However, together with the IFF12 update, Manitoba Hydro has undertaken new work to make available additional analysis with respect to a later onset drought under the Recommended Development Plan. This additional analysis is for the 5-year and 7-year drought starting in 2021/22.

To provide some context for the results from this analysis, we can draw upon drought analysis that was provided in the KPMG Report (Appendix J) during the 2010-11 GRA proceedings and Risk Review. The 2010 analysis (which used information from the 2009 IFF), demonstrates that the impact of a drought is more significant in time periods when no new generation is planned than in time periods when new generation is planned. This outcome is confirmed in the 2012 analysis provided below, which shows that a drought in the 2021/22 timeframe, when considering the financial impact on both net income and on retained earnings, would have less impact than a drought starting in 2014/15. Retained earnings would decline to a similar level in both cases, but would recover in considerably less time for the later onset drought. It should be noted that in terms of absolute dollars, the financial impact of a drought starting in 2021/22 would be higher than a drought starting in 2014/15.

Manitoba Hydro will be conducting an expanded drought analysis as part of the NFAT submission to reconfirm the financial impact of drought.

The following drought impact summary tables and Electric Operations Project Operating Statements are consistent with assumptions utilized in IFF12.

Drought Impact Summary Tables

	2021/22	2022/23	2023/24	2024/25	2025/26	Total
Impact of 5-Year Drought on Revenues (millions of \$ CDN)						
Revenue						
Extra-Provincial Sales	-239	-232	-236	-167	-185	-1059
Expense						
Water Rental	-30	-35	-20	-21	-17	-124
Fuel & Power Purchase	367	560	155	361	92	1534
Net Revenue (Excluding Finance Expense)	-577	-758	-370	-507	-260	-2473

Impact of 5-Year Drought on Energy (GWh/yr)						
Extra-Provincial Sales	-3668	-3437	-3435	-2377	-2894	-15811
Hydro Generation	-9331	-10814	-6597	-6909	-5706	-39356
Fuel & Power Purchase	3582	3796	2896	2787	2622	15684

	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Impact of 7-Year Drought on Revenues (millions of \$ CDN)								
Revenue								
Extra-Provincial Sales	-147	-106	-208	-288	-321	-369	-46	-1485
Expense								
Water Rental	-16	-10	-19	-31	-37	-39	-9	-161
Fuel & Power Purchase	99	-1	122	477	568	535	1	1802
Net Revenue (Excluding Finance Expense)	-231	-96	-312	-734	-853	-866	-39	-3130

Impact of 7-Year Drought on Energy (GWh/yr)								
Extra-Provincial Sales	-2573	-2310	-3194	-3649	-3813	-4789	-2051	-22379
Hydro Generation	-5155	-3496	-6009	-9738	-11388	-12024	-3138	-50947
Fuel & Power Purchase	2419	1125	2589	3465	3961	4350	1014	18924

ELECTRIC OPERATIONS (MH12)
PROJECTED OPERATING STATEMENT
Alternative Scenario - 5 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REVENUES										
General Consumers at approved rates	1,331	1,361	1,374	1,390	1,404	1,424	1,447	1,462	1,485	1,506
additional*	0	48	104	165	228	297	371	447	531	619
Extraprovincial	357	344	343	380	406	435	441	464	711	599
Other	14	15	15	15	15	16	16	16	17	17
	<u>1,702</u>	<u>1,768</u>	<u>1,836</u>	<u>1,950</u>	<u>2,054</u>	<u>2,172</u>	<u>2,274</u>	<u>2,390</u>	<u>2,743</u>	<u>2,742</u>
EXPENSES										
Operating and Administrative	455	471	544	556	567	590	601	617	639	653
Finance Expense	452	444	492	524	586	656	767	781	1,001	1,111
Depreciation and Amortization	399	430	372	391	410	447	494	508	580	619
Water Rentals and Assessments	117	116	112	112	112	112	112	113	121	95
Fuel and Power Purchased	143	166	179	191	206	221	230	231	253	633
Capital and Other Taxes	88	96	101	110	119	129	136	143	149	158
Corporate Allocation	9	9	8	8	8	8	8	8	8	8
	<u>1,664</u>	<u>1,732</u>	<u>1,808</u>	<u>1,892</u>	<u>2,009</u>	<u>2,163</u>	<u>2,349</u>	<u>2,401</u>	<u>2,753</u>	<u>3,278</u>
Non-controlling Interest	14	24	21	16	13	10	6	3	4	(3)
Net Income	<u>53</u>	<u>60</u>	<u>50</u>	<u>73</u>	<u>57</u>	<u>19</u>	<u>(68)</u>	<u>(9)</u>	<u>(7)</u>	<u>(539)</u>
* Additional General Consumers Revenue Percent Increase	0.00%	3.50%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	0.00%	3.50%	7.59%	11.84%	16.26%	20.85%	25.62%	30.58%	35.74%	41.10%
Financial Ratios										
Equity	25%	22%	17%	15%	14%	13%	12%	11%	10%	8%
Interest Coverage	1.09	1.10	1.07	1.09	1.06	1.02	0.94	0.99	0.99	0.60
Capital Coverage	1.09	0.89	0.77	0.90	1.21	1.37	1.11	1.53	1.49	0.28

ELECTRIC OPERATIONS (MH12)
PROJECTED OPERATING STATEMENT
Alternative Scenario - 5 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
REVENUES										
General Consumers at approved rates	1,529	1,552	1,575	1,598	1,621	1,644	1,669	1,693	1,717	1,741
additional*	713	814	921	1,035	1,155	1,283	1,419	1,564	1,716	1,878
Extraprovincial	641	627	684	752	1,209	1,288	1,304	1,312	1,331	1,341
Other	17	18	18	18	19	19	19	20	20	21
	<u>2,900</u>	<u>3,011</u>	<u>3,199</u>	<u>3,403</u>	<u>4,003</u>	<u>4,234</u>	<u>4,411</u>	<u>4,588</u>	<u>4,784</u>	<u>4,980</u>
EXPENSES										
Operating and Administrative	667	681	696	727	741	757	775	789	805	823
Finance Expense	1,143	1,185	1,209	1,362	1,631	1,824	1,801	1,775	1,792	1,738
Depreciation and Amortization	630	637	645	690	770	828	837	849	880	893
Water Rentals and Assessments	92	105	103	115	147	151	151	151	152	153
Fuel and Power Purchased	839	449	681	375	277	291	304	318	328	341
Capital and Other Taxes	167	176	183	188	192	193	196	198	203	202
Corporate Allocation	8	8	8	8	8	8	8	8	7	7
	<u>3,546</u>	<u>3,242</u>	<u>3,524</u>	<u>3,465</u>	<u>3,766</u>	<u>4,052</u>	<u>4,072</u>	<u>4,086</u>	<u>4,167</u>	<u>4,157</u>
Non-controlling Interest	(5)	(10)	(13)	(9)	(11)	(14)	(16)	(20)	(22)	(25)
Net Income	<u>(650)</u>	<u>(242)</u>	<u>(338)</u>	<u>(71)</u>	<u>227</u>	<u>168</u>	<u>322</u>	<u>482</u>	<u>595</u>	<u>798</u>
* Additional General Consumers Revenue Percent Increase	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	46.68%	52.47%	58.49%	64.75%	71.26%	78.03%	85.06%	92.37%	99.97%	107.86%
Financial Ratios										
Equity	5%	4%	3%	2%	3%	3%	5%	6%	8%	10%
Interest Coverage	0.56	0.85	0.81	0.96	1.12	1.09	1.17	1.26	1.33	1.45
Capital Coverage	0.07	0.88	0.72	1.35	2.38	2.08	2.23	2.40	2.49	3.33

ELECTRIC OPERATIONS (MH12)
PROJECTED BALANCE SHEET
Alternative Scenario - 5 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ASSETS										
Plant in Service	15,374	16,435	17,104	18,255	18,807	22,348	22,781	25,825	29,899	30,432
Accumulated Depreciation	(5,173)	(5,536)	(5,856)	(6,223)	(6,622)	(7,064)	(7,553)	(8,057)	(8,632)	(9,248)
Net Plant in Service	10,201	10,899	11,248	12,032	12,185	15,285	15,228	17,769	21,267	21,184
Construction in Progress	2,108	2,878	4,198	5,128	6,794	5,439	6,879	5,422	3,038	4,821
Current and Other Assets	1,869	1,735	1,391	1,578	1,790	2,027	1,844	1,974	2,059	1,725
Goodwill and Intangible Assets	180	165	150	134	123	113	105	98	92	88
Regulated Assets	231	225	-	-	-	-	-	-	-	-
	14,590	15,902	16,988	18,873	20,892	22,864	24,056	25,262	26,456	27,816
LIABILITIES AND EQUITY										
Long-Term Debt	9,428	11,199	12,741	14,614	16,304	18,077	19,972	20,739	22,062	24,012
Current and Other Liabilities	2,086	1,569	1,743	1,726	2,032	2,233	1,610	2,073	1,966	1,936
Contributions in Aid of Construction	336	345	350	355	359	369	375	382	389	396
Retained Earnings	2,442	2,502	2,295	2,368	2,425	2,444	2,376	2,368	2,361	1,821
Accumulated Other Comprehensive Income	299	287	(142)	(189)	(228)	(259)	(278)	(298)	(321)	(349)
	14,590	15,902	16,988	18,873	20,892	22,864	24,056	25,262	26,456	27,816

ELECTRIC OPERATIONS (MH12)
PROJECTED BALANCE SHEET
Alternative Scenario - 5 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
ASSETS										
Plant in Service	30,962	31,525	32,212	37,906	43,040	44,544	45,284	45,838	47,824	48,551
Accumulated Depreciation	(9,876)	(10,512)	(11,157)	(11,848)	(12,618)	(13,446)	(14,284)	(15,135)	(16,016)	(16,911)
Net Plant in Service	21,086	21,013	21,055	26,059	30,422	31,098	31,000	30,703	31,808	31,640
Construction in Progress	6,576	8,048	9,200	5,077	1,364	737	1,070	1,513	464	539
Current and Other Assets	1,808	2,164	2,441	2,271	2,591	2,925	3,229	3,736	3,782	4,877
Goodwill and Intangible Assets	85	83	82	82	81	80	79	78	77	76
Regulated Assets	-	-	-	-	-	-	-	-	-	-
	<u>29,554</u>	<u>31,308</u>	<u>32,779</u>	<u>33,488</u>	<u>34,458</u>	<u>34,840</u>	<u>35,378</u>	<u>36,030</u>	<u>36,131</u>	<u>37,132</u>
LIABILITIES AND EQUITY										
Long-Term Debt	26,814	29,017	30,370	31,572	32,174	32,315	32,466	32,169	32,358	32,131
Current and Other Liabilities	1,531	1,316	1,764	1,335	1,468	1,533	1,591	2,050	1,359	1,780
Contributions in Aid of Construction	403	411	418	426	433	441	449	457	466	474
Retained Earnings	1,171	929	592	520	747	915	1,237	1,719	2,314	3,112
Accumulated Other Comprehensive Income	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)
	<u>29,554</u>	<u>31,308</u>	<u>32,779</u>	<u>33,488</u>	<u>34,458</u>	<u>34,840</u>	<u>35,378</u>	<u>36,030</u>	<u>36,131</u>	<u>37,132</u>

ELECTRIC OPERATIONS (MH12)
PROJECTED CASH FLOW STATEMENT
Alternative Scenario - 5 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
OPERATING ACTIVITIES										
Cash Receipts from Customers	1,692	1,768	1,836	1,950	2,054	2,172	2,274	2,390	2,743	2,742
Cash Paid to Suppliers and Employees	(782)	(822)	(909)	(941)	(975)	(1,020)	(1,047)	(1,069)	(1,126)	(1,500)
Interest Paid	(466)	(476)	(509)	(556)	(608)	(700)	(816)	(826)	(1,050)	(1,151)
Interest Received	28	17	24	26	31	39	41	39	35	32
	472	486	442	478	502	491	453	533	602	123
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1,036	1,970	1,760	2,190	2,180	2,580	2,190	1,390	1,980	2,390
Sinking Fund Withdrawals	129	393	102	26	-	16	416	187	269	676
Retirement of Long-Term Debt	(180)	(808)	(176)	(312)	(347)	(530)	(829)	(306)	(635)	(679)
Other	(42)	(7)	(17)	(19)	(17)	(13)	(24)	(13)	(34)	(9)
	943	1,548	1,670	1,886	1,817	2,053	1,753	1,258	1,580	2,377
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1,381)	(1,922)	(2,028)	(2,083)	(2,214)	(2,174)	(1,863)	(1,666)	(1,799)	(2,299)
Sinking Fund Payment	(107)	(208)	(124)	(188)	(166)	(227)	(219)	(224)	(248)	(343)
Other	(21)	(20)	(21)	(20)	(32)	(42)	(28)	(28)	(33)	(38)
	(1,509)	(2,151)	(2,173)	(2,291)	(2,412)	(2,443)	(2,111)	(1,919)	(2,080)	(2,679)
Net Increase (Decrease) in Cash	(94)	(117)	(62)	73	(94)	101	96	(128)	102	(179)
Cash at Beginning of Year	43	(51)	(168)	(230)	(157)	(251)	(150)	(54)	(182)	(80)
Cash at End of Year	(51)	(168)	(230)	(157)	(251)	(150)	(54)	(182)	(80)	(259)

ELECTRIC OPERATIONS (MH12)
PROJECTED CASH FLOW STATEMENT
Alternative Scenario - 5 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPERATING ACTIVITIES										
Cash Receipts from Customers	2,900	3,011	3,199	3,403	4,003	4,234	4,411	4,588	4,784	4,980
Cash Paid to Suppliers and Employees	(1,723)	(1,368)	(1,615)	(1,356)	(1,305)	(1,337)	(1,368)	(1,394)	(1,422)	(1,450)
Interest Paid	(1,160)	(1,195)	(1,233)	(1,410)	(1,680)	(1,896)	(1,884)	(1,869)	(1,913)	(1,833)
Interest Received	18	20	30	35	45	62	80	90	103	87
	35	467	380	673	1,064	1,063	1,240	1,415	1,553	1,785
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	2,770	2,180	1,790	1,190	590	190	390	350	190	190
Sinking Fund Withdrawals	156	-	-	450	-	-	60	250	700	13
Retirement of Long-Term Debt	(432)	-	-	(450)	-	-	(60)	(220)	(700)	(13)
Other	(1)	(0)	(1)	(1)	(0)	0	2	2	3	(16)
	2,493	2,180	1,789	1,189	590	190	392	382	193	174
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(2,268)	(2,018)	(1,822)	(1,553)	(1,403)	(858)	(1,054)	(977)	(918)	(781)
Sinking Fund Payment	(255)	(283)	(314)	(344)	(348)	(369)	(386)	(402)	(408)	(392)
Other	(29)	(32)	(25)	(25)	(28)	(26)	(26)	(26)	(26)	(26)
	(2,552)	(2,333)	(2,161)	(1,923)	(1,778)	(1,253)	(1,466)	(1,405)	(1,352)	(1,200)
Net Increase (Decrease) in Cash	(24)	314	9	(61)	(125)	1	165	393	394	759
Cash at Beginning of Year	(259)	(283)	31	40	(21)	(146)	(145)	20	413	807
Cash at End of Year	(283)	31	40	(21)	(146)	(145)	20	413	807	1,566

ELECTRIC OPERATIONS (MH12)
PROJECTED OPERATING STATEMENT
Alternative Scenario - 7 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
REVENUES										
General Consumers at approved rates	1,331	1,361	1,374	1,390	1,404	1,424	1,447	1,462	1,485	1,506
additional*	0	48	104	165	228	297	371	447	531	619
Extraprovincial	357	344	343	380	406	435	441	464	711	692
Other	14	15	15	15	15	16	16	16	17	17
	<u>1,702</u>	<u>1,768</u>	<u>1,836</u>	<u>1,950</u>	<u>2,054</u>	<u>2,172</u>	<u>2,274</u>	<u>2,390</u>	<u>2,743</u>	<u>2,834</u>
EXPENSES										
Operating and Administrative	455	471	544	556	567	590	601	617	639	653
Finance Expense	452	444	492	524	586	656	767	781	1,001	1,103
Depreciation and Amortization	399	430	372	391	410	447	494	508	580	619
Water Rentals and Assessments	117	116	112	112	112	112	112	113	121	109
Fuel and Power Purchased	143	166	179	191	206	221	230	231	253	366
Capital and Other Taxes	88	96	101	110	119	129	136	143	149	158
Corporate Allocation	9	9	8	8	8	8	8	8	8	8
	<u>1,664</u>	<u>1,732</u>	<u>1,808</u>	<u>1,892</u>	<u>2,009</u>	<u>2,163</u>	<u>2,349</u>	<u>2,401</u>	<u>2,753</u>	<u>3,016</u>
Non-controlling Interest	14	24	21	16	13	10	6	3	4	(3)
Net Income	<u>53</u>	<u>60</u>	<u>50</u>	<u>73</u>	<u>57</u>	<u>19</u>	<u>(68)</u>	<u>(9)</u>	<u>(7)</u>	<u>(185)</u>
* Additional General Consumers Revenue Percent Increase	0.00%	3.50%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	0.00%	3.50%	7.59%	11.84%	16.26%	20.85%	25.62%	30.58%	35.74%	41.10%
Financial Ratios										
Equity	25%	22%	17%	15%	14%	13%	12%	11%	10%	9%
Interest Coverage	1.09	1.10	1.07	1.09	1.06	1.02	0.94	0.99	0.99	0.86
Capital Coverage	1.09	0.89	0.77	0.90	1.21	1.37	1.11	1.53	1.49	1.07

ELECTRIC OPERATIONS (MH12)
PROJECTED OPERATING STATEMENT
Alternative Scenario - 7 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
REVENUES										
General Consumers										
at approved rates	1,529	1,552	1,575	1,598	1,621	1,644	1,669	1,693	1,717	1,741
additional*	713	814	921	1,035	1,155	1,283	1,419	1,564	1,716	1,878
Extraprovincial	767	655	564	616	840	1,242	1,304	1,312	1,331	1,341
Other	17	18	18	18	19	19	19	20	20	21
	<u>3,026</u>	<u>3,038</u>	<u>3,079</u>	<u>3,267</u>	<u>3,634</u>	<u>4,188</u>	<u>4,411</u>	<u>4,588</u>	<u>4,784</u>	<u>4,980</u>
EXPENSES										
Operating and Administrative	667	681	696	727	741	757	775	789	805	823
Finance Expense	1,105	1,116	1,139	1,310	1,620	1,849	1,829	1,804	1,822	1,773
Depreciation and Amortization	630	637	645	690	770	828	837	849	880	893
Water Rentals and Assessments	116	107	94	96	107	140	151	151	152	153
Fuel and Power Purchased	279	416	797	851	814	294	304	318	328	341
Capital and Other Taxes	167	176	183	188	192	193	196	198	203	202
Corporate Allocation	8	8	8	8	8	8	8	8	7	7
	<u>2,972</u>	<u>3,142</u>	<u>3,561</u>	<u>3,870</u>	<u>4,251</u>	<u>4,070</u>	<u>4,100</u>	<u>4,116</u>	<u>4,197</u>	<u>4,192</u>
Non-controlling Interest	(5)	(10)	(13)	(9)	(11)	(14)	(16)	(20)	(22)	(25)
Net Income	<u>49</u>	<u>(113)</u>	<u>(495)</u>	<u>(613)</u>	<u>(628)</u>	<u>104</u>	<u>294</u>	<u>453</u>	<u>565</u>	<u>764</u>
* Additional General Consumers Revenue										
Percent Increase	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%	3.95%
Cumulative Percent Increase	46.68%	52.47%	58.49%	64.75%	71.26%	78.03%	85.06%	92.37%	99.97%	107.86%
Financial Ratios										
Equity	9%	8%	6%	4%	2%	2%	3%	4%	6%	9%
Interest Coverage	1.03	0.93	0.70	0.65	0.66	1.06	1.16	1.24	1.30	1.42
Capital Coverage	1.42	1.10	0.42	0.28	0.47	1.95	2.18	2.35	2.44	3.28

ELECTRIC OPERATIONS (MH12)
PROJECTED BALANCE SHEET
Alternative Scenario - 7 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ASSETS										
Plant in Service	15,374	16,435	17,104	18,255	18,807	22,348	22,781	25,825	29,899	30,432
Accumulated Depreciation	(5,173)	(5,536)	(5,856)	(6,223)	(6,622)	(7,064)	(7,553)	(8,057)	(8,632)	(9,248)
Net Plant in Service	10,201	10,899	11,248	12,032	12,185	15,285	15,228	17,769	21,267	21,184
Construction in Progress	2,108	2,878	4,198	5,128	6,794	5,439	6,879	5,422	3,038	4,821
Current and Other Assets	1,869	1,735	1,391	1,578	1,790	2,027	1,844	1,974	2,059	1,725
Goodwill and Intangible Assets	180	165	150	134	123	113	105	98	92	88
Regulated Assets	231	225	-	-	-	-	-	-	-	-
	14,590	15,902	16,988	18,873	20,892	22,864	24,056	25,262	26,456	27,816
LIABILITIES AND EQUITY										
Long-Term Debt	9,428	11,199	12,741	14,614	16,304	18,077	19,972	20,739	22,062	23,612
Current and Other Liabilities	2,086	1,569	1,743	1,726	2,032	2,233	1,610	2,073	1,966	1,982
Contributions in Aid of Construction	336	345	350	355	359	369	375	382	389	396
Retained Earnings	2,442	2,502	2,295	2,368	2,425	2,444	2,376	2,368	2,361	2,176
Accumulated Other Comprehensive Income	299	287	(142)	(189)	(228)	(259)	(278)	(298)	(321)	(349)
	14,590	15,902	16,988	18,873	20,892	22,864	24,056	25,262	26,456	27,816

ELECTRIC OPERATIONS (MH12)
PROJECTED BALANCE SHEET
Alternative Scenario - 7 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
ASSETS										
Plant in Service	30,962	31,525	32,212	37,906	43,040	44,544	45,284	45,838	47,824	48,551
Accumulated Depreciation	(9,876)	(10,512)	(11,157)	(11,848)	(12,618)	(13,446)	(14,284)	(15,135)	(16,016)	(16,911)
Net Plant in Service	21,086	21,013	21,055	26,059	30,422	31,098	31,000	30,703	31,808	31,640
Construction in Progress	6,576	8,048	9,200	5,077	1,364	737	1,070	1,513	464	539
Current and Other Assets	1,804	2,126	2,375	2,233	2,547	2,883	3,169	3,636	3,652	4,917
Goodwill and Intangible Assets	85	83	82	82	81	80	79	78	77	76
Regulated Assets	-	-	-	-	-	-	-	-	-	-
	29,550	31,270	32,713	33,451	34,414	34,797	35,318	35,930	36,001	37,172
LIABILITIES AND EQUITY										
Long-Term Debt	25,814	27,817	29,170	30,972	32,574	32,715	32,866	32,569	32,758	32,731
Current and Other Liabilities	1,474	1,297	1,873	1,414	1,396	1,526	1,594	2,043	1,351	1,776
Contributions in Aid of Construction	403	411	418	426	433	441	449	457	466	474
Retained Earnings	2,225	2,111	1,616	1,004	375	479	774	1,227	1,792	2,555
Accumulated Other Comprehensive Income	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)	(365)
	29,550	31,270	32,713	33,451	34,414	34,797	35,318	35,930	36,001	37,172

ELECTRIC OPERATIONS (MH12)
PROJECTED CASH FLOW STATEMENT
Alternative Scenario - 7 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
OPERATING ACTIVITIES										
Cash Receipts from Customers	1,692	1,768	1,836	1,950	2,054	2,172	2,274	2,390	2,743	2,834
Cash Paid to Suppliers and Employees	(782)	(822)	(909)	(941)	(975)	(1,020)	(1,047)	(1,069)	(1,126)	(1,246)
Interest Paid	(466)	(476)	(509)	(556)	(608)	(700)	(816)	(826)	(1,050)	(1,150)
Interest Received	28	17	24	26	31	39	41	39	35	32
	472	486	442	478	502	491	453	533	602	471
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	1,036	1,970	1,760	2,190	2,180	2,580	2,190	1,390	1,980	1,990
Sinking Fund Withdrawals	129	393	102	26	-	16	416	187	269	676
Retirement of Long-Term Debt	(180)	(808)	(176)	(312)	(347)	(530)	(829)	(306)	(635)	(679)
Other	(42)	(7)	(17)	(19)	(17)	(13)	(24)	(13)	(34)	(9)
	943	1,548	1,670	1,886	1,817	2,053	1,753	1,258	1,580	1,977
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(1,381)	(1,922)	(2,028)	(2,083)	(2,214)	(2,174)	(1,863)	(1,666)	(1,799)	(2,299)
Sinking Fund Payment	(107)	(208)	(124)	(188)	(166)	(227)	(219)	(224)	(248)	(343)
Other	(21)	(20)	(21)	(20)	(32)	(42)	(28)	(28)	(33)	(38)
	(1,509)	(2,151)	(2,173)	(2,291)	(2,412)	(2,443)	(2,111)	(1,919)	(2,080)	(2,679)
Net Increase (Decrease) in Cash	(94)	(117)	(62)	73	(94)	101	96	(128)	102	(231)
Cash at Beginning of Year	43	(51)	(168)	(230)	(157)	(251)	(150)	(54)	(182)	(80)
Cash at End of Year	(51)	(168)	(230)	(157)	(251)	(150)	(54)	(182)	(80)	(311)

ELECTRIC OPERATIONS (MH12)
PROJECTED CASH FLOW STATEMENT
Alternative Scenario - 7 year drought beginning in 2021/22
(In Millions of Dollars)

For the year ended March 31

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPERATING ACTIVITIES										
Cash Receipts from Customers	3,026	3,038	3,079	3,267	3,634	4,188	4,411	4,588	4,784	4,980
Cash Paid to Suppliers and Employees	(1,187)	(1,337)	(1,722)	(1,813)	(1,801)	(1,329)	(1,368)	(1,394)	(1,422)	(1,450)
Interest Paid	(1,128)	(1,132)	(1,163)	(1,347)	(1,665)	(1,919)	(1,909)	(1,896)	(1,941)	(1,861)
Interest Received	18	19	29	34	44	60	78	88	101	85
	<u>728</u>	<u>589</u>	<u>222</u>	<u>141</u>	<u>212</u>	<u>999</u>	<u>1,212</u>	<u>1,386</u>	<u>1,523</u>	<u>1,755</u>
FINANCING ACTIVITIES										
Proceeds from Long-Term Debt	2,170	1,980	1,790	1,790	1,590	190	390	350	190	390
Sinking Fund Withdrawals	156	-	-	450	-	-	60	250	700	13
Retirement of Long-Term Debt	(432)	-	-	(450)	-	-	(60)	(220)	(700)	(13)
Other	(1)	(0)	(1)	(1)	(0)	0	2	2	3	(16)
	<u>1,893</u>	<u>1,980</u>	<u>1,789</u>	<u>1,789</u>	<u>1,590</u>	<u>190</u>	<u>392</u>	<u>382</u>	<u>193</u>	<u>374</u>
INVESTING ACTIVITIES										
Property, Plant and Equipment, net of contributions	(2,268)	(2,018)	(1,822)	(1,553)	(1,403)	(858)	(1,054)	(977)	(918)	(781)
Sinking Fund Payment	(252)	(272)	(302)	(333)	(342)	(371)	(389)	(404)	(410)	(395)
Other	(29)	(32)	(25)	(25)	(28)	(26)	(26)	(26)	(26)	(26)
	<u>(2,549)</u>	<u>(2,322)</u>	<u>(2,149)</u>	<u>(1,911)</u>	<u>(1,772)</u>	<u>(1,255)</u>	<u>(1,469)</u>	<u>(1,408)</u>	<u>(1,354)</u>	<u>(1,203)</u>
Net Increase (Decrease) in Cash	73	246	(137)	19	30	(65)	135	361	362	926
Cash at Beginning of Year	(311)	(239)	8	(129)	(111)	(81)	(146)	(11)	350	712
Cash at End of Year	<u>(239)</u>	<u>8</u>	<u>(129)</u>	<u>(111)</u>	<u>(81)</u>	<u>(146)</u>	<u>(11)</u>	<u>350</u>	<u>712</u>	<u>1,638</u>