

**DOMINION BOND RATING SERVICE LIMITED -
THE MANITOBA HYDRO-ELECTRIC BOARD**

DÉCEMBRE 1999

The Manitoba Hydro-Electric Board

(The rating is based on the Provincial guarantee. This report specifically analyzes the Utility.)

Current Report: December 1999

Previous Report: September 30, 1998

RATING

<u>Rating</u>	<u>Trend</u>	<u>Rating Action</u>	<u>Debt Rated</u>
"A"	Stable	Confirmed	Long Term Debt

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RATING HISTORY (as at Dec. 31)	<u>Current</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>
Long Term Debt	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"

UPDATE

The rating is a flow through of the rating of the Province of Manitoba, which unconditionally guarantees the Utility's debt. The Utility strengths are as follows: (1) Low cost hydro-based generation, which accounts for one of the lowest variable cost structures in Canada. In addition, the water storage capacity of hydro-based generation allows for strategic energy trades and the ability to maximize export revenues. (2) Membership status in the U.S. MAPP, which has improved the Utility's access to U.S. wholesale markets, and good export interconnections to the U.S., Saskatchewan and Ontario, (both provinces are currently operating in very tight supply-demand market environments) generates material incremental earnings. In addition, there is substantial potential for hydro capacity additions in the province, provided that the Utility can identify a market for this energy. (3) The Centra Gas acquisition positions the

Utility to benefit from the trend in energy convergence and should allow for material operating synergies. The successful integration of Centra Gas will likely take some time given the differences in the corporate cultures of the two entities. The Utility must contend with the following challenges: (1) Excessively high debt levels account for consistently weak financial ratios. Key debt ratios may weaken as a result of the \$242 million acquisition of Centra Gas Manitoba. (2) Earnings are sensitive to water levels, which can have a material impact on electricity exports. (3) While the book value of debt has been fixed, debt levels and interest costs are sensitive to currency exchange rates, as 48% of outstanding debt is denominated in U.S. dollars. However, associated interest costs are largely hedged by future U.S. revenues and U.S. dollar sinking fund assets.

CONSIDERATIONS

Strengths:

- Debt is guaranteed by the Provincial Government
- Low cost hydro-based capacity: water storage capacity allows for maximization of export revenues
- Membership status in U.S. MAPP, interconnections with the U.S. markets, Saskatchewan and Ontario
- Centra Gas acquisition positions Utility to benefit from trend in energy convergence

Challenges:

- Excessive debt levels: Centra Gas acquisition may cause some deterioration in financial ratios
- Earnings sensitive to water levels
- Sensitivity to currency exchange rates: 48% of debt dominated in U.S. dollars
- High transmission losses
- Native Indian claims/settlements

FINANCIAL INFORMATION

	12 mos. ended	For years ended March 31						
	<u>Sep-99</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>
EBIT Interest Coverage (times)	1.24	1.20	1.22	1.21	1.12	1.10	1.13	0.87
Net Debt in the Capital Structure (1)	89.2%	88.9%	90.3%	92.1%	93.6%	94.7%	95.7%	96.9%
Cash Flow/Total Debt (times)	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.03
Cash Flow/Capital Expenditures (times)	1.09	0.98	1.35	1.03	1.00	1.03	0.94	0.46
Operating Income (\$ millions)	493	482	502	495	472	457	459	389
Net Income (\$ millions)	114	100	111	101	70	56	69	(24)
Operating Cash Flow (\$ millions)	351	325	334	307	271	241	254	153
Electricity Sales (millions of kWhs)	26,084	27,692	29,462	27,567	25,460	24,165	24,103	23,642
Electricity Revenues (cents per kWh sold)	4.23	3.88	3.52	3.69	3.85	3.88	3.81	3.45
Variable Costs (cents per net gen kWh sold)	-	0.94	0.75	0.84	0.91	0.94	0.94	0.94
Fixed Costs (cents per net gen kWh sold)	-	2.69	2.41	2.50	2.70	2.73	2.64	2.62
Purchased Power (cents per gross kWh purchased)	-	1.97	3.21	3.43	1.72	1.50	1.53	0.00
Pre-tax Margin* (cents per kWh sold)	0.37	0.34	0.36	0.35	0.26	0.22	0.28	(0.11)

(1) Net of sinking fund assets. Customer contributions excluded from capital structure.

* Excludes ancillary revenues.

THE COMPANY The Manitoba Hydro-Electric Board, a Crown corporation, generates, transmits and distributes electricity in the province of Manitoba. The Utility acquired the province's private sector gas distributor, Centra Gas Manitoba, in July 1999.

Integrated Electric Utility/Gas Distributor

DOMINION BOND RATING SERVICE LIMITED

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CONSIDERATIONS

Strengths: (1) The Utility's debt is unconditionally guaranteed by the Province of Manitoba. As a result, the rating of The Manitoba Hydro Electric Board is a flow through of the rating of the Province of Manitoba.

(2) Hydro-based generating capacity accounts for 95% of installed capacity and accounts for one of the lowest variable cost structures in Canada, (under 1¢ per kWh), surpassed only by Churchill Falls in Labrador.

(3) Water storage capacity of the hydro facilities allows for strategic power trades, allowing the Utility to generate energy during peak periods to maximize export revenues.

(4) The Utility has excellent interconnections (about 55% of installed capacity) with 2,050-Mw to the U.S. MAPP, and 450-Mw to Saskatchewan and 240-Mw to Ontario, both of which are presently operating in tight supply-demand market environments. This allows for material incremental earnings.

(5) There is considerable potential for capacity additions in the Province, as much as 5,000-Mw, equal to almost 100% of existing capacity. However, the Utility would have to identify a market for the additional energy.

(6) The \$242 million acquisition of the provincial gas distributor, Centra Gas Manitoba, from Westcoast Energy Inc., puts the Utility in a good position to benefit from the trend in energy convergence. In addition, there is a potential for material operating synergies that could benefit both the electricity and gas distribution operations. The successful integration of Centra Gas may, however, take some time given the different corporate cultures of the two entities involved.

Challenges: (1) Debt levels remain excessively high and largely account for consistently weak financial ratios. Key

EARNINGS

Earnings in F1998 fell 10% to \$100 million compared to \$111 million the previous year, primarily due to higher external power purchases and fuel costs necessitated by a sharp reduction in water levels. Hydraulic generation fell almost 14% during the year and accounted for a sharp decrease in electricity exports. The impact on earnings was, however, materially offset by higher prices for electricity exports in U.S. markets.

Outlook: Although water levels are returning to more normal levels (last year's levels were abnormally high) and hydro-based electricity generated and available for sale has fallen, earnings for F1999 should improve compared to last year due to the consolidation and integration of Centra Gas as well as higher prices received for electricity exports. Water levels will likely continue to be the primary factor that will influence future earnings, but to-date, stronger export prices have largely offset the decline in volumes of electricity exported.

debt ratios may weaken somewhat as a result of the acquisition of Centra Gas Manitoba, which closed on July 30, 1999.

(2) Earnings are sensitive to water levels, which can have a material impact on electricity exports.

(3) Although the book value of outstanding foreign dollar debt has been fixed, the Utility remains sensitive to currency exchange rates. Had debt obligations been translated at prevailing rates, outstanding debt would have increased by \$818 million in F1998. However, associated interest costs are hedged by future U.S. revenues (and long-term sales contracts) as well as U.S. dollar sinking fund assets.

(4) Generating facilities are located relatively far from markets, which results in high transmission losses.

(5) The Utility has had to deal with native Indian claims that northern development projects have adversely affected their communities. To date, the Utility has approved \$396 million in associated settlements and has recorded a \$136 million liability in anticipated known settlements. The Utility has an agreement with the Provincial Government to assume certain obligations of the Province associated with the northern development projects and their impact on five native communities. Settlements have been reached with four of these communities. The final outcome and/or full impact of these settlements has yet to be fully determined.

(6) Domestic electricity rates for large industrial customers have been voluntarily frozen since 1992 and since 1997 for residential customers. Electricity rates in Manitoba are amongst the lowest in North America, and contribute to weak financial ratios.

The acquisition of Centra Gas Manitoba, which closed July 30, 1999, could provide material operating synergies, which could benefit both the electricity and gas distribution operations, assuming there are no problems in integrating the new operating entity. DBRS expects that there will likely be some adjustments, however, given the different cultures of government operations and the private sector. In addition, the gas distribution entity, unlike the electricity operations, has historically been subject to regulatory review. The regulator approved the acquisition in August but has recommended that regulatory oversight of the gas operations continue. In addition, the regulator also recommended that electricity operations receive the same comprehensive regulatory oversight that Centra Gas was previously subject to (under the Public Utility Board Act Manitoba Hydro is exempt from the more rigorous review that Centra Gas receives) and strongly recommended that the operations of one utility should not cross-subsidize the operations of the other. The decision with respect to regulatory oversight will be finalized at a future date.

MANITOBA HYDRO ACT

In June 1997, the Manitoba Hydro Act was altered. The amendments have allowed Manitoba Hydro to establish and publish a transmission tariff to allow for open access onto its transmission grid, as well as the possibility of joint-venture partnerships and the creation of subsidiaries to

explore related business opportunities in both domestic and foreign markets. Given the very low domestic rates, DBRS does not expect the Utility to experience any earnings pressures as a result of competitive factors.

FINANCIAL PROFILE

Operating cash flows (before working capital changes) are expected to continue to be sufficient to finance capital expenditures (net of customer contributions). Earnings growth together with the lack of dividend payment requirement, have contributed to a slow but steady improvement in balance sheet leverage from 97% in 1990 to 89% as at September 1999. Centra Gas (see separate report) also has historically generated sufficient funds to cover capital expenditures. Debt levels remain excessively high, however, and are understated as the Utility has fixed the book value of foreign dollar debt obligations. Had the

Utility translated foreign dollar debt at prevailing rates, outstanding debt levels would have increased by \$818 million in F1998 and \$620 million in F1997.

DBRS expects that key debt related ratios may weaken somewhat as a result of the Centra Gas acquisition. The magnitude of the change will be partially determined by whether Centra Gas is fully integrated with Manitoba Hydro which has no restrictions in terms of its capital structure. Centra Gas has historically operated with an equity component of about 40%.

FINANCIAL TARGETS

The Company has set the following financial targets. (1) Gross interest coverage at 1.20 to 1.35 times. (2) Capital expenditures to be financed with internally generated cash flows. This excludes capital expenditures associated with major capacity expansions of generating facilities and the transmission grid. (3) A debt-to-equity target of 75% by 2005-2006. Note that Manitoba Hydro includes customer contributions in its calculation and that the book value of

U.S. dollar debt has been frozen. (For the sake of comparability, DBRS excludes contributions in its debt calculations. Some utilities, particularly in the private sector, have netted the balance of customer contributions from fixed assets.) The Utility has achieved its interest coverage and cash flow/capital expenditure targets. The debt-to-capital ratio target will, however, likely be adversely affected by the acquisition of Centra Gas Manitoba.

OPERATING LINES OF CREDIT

Bank lines up to \$500 million available either in Canadian or U.S. currency.

DEBT MATURITY SCHEDULE

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
(millions)	\$0	\$157	\$189	\$127	\$0

THE WATERSHEDS AND STORAGE CAPACITY

Manitoba Hydro draws water from three distinct watersheds. (1) The main source is the Winnipeg River, which runs through northern Minnesota and northwestern Ontario. Because of the 900 feet of head from the source, the large volume of water, and the fact that the same water goes through virtually all the generators which are all downstream, this watershed accounts for about 40% of the electricity produced by Manitoba Hydro. (2) The Prairie region, which extends to the Continental Divide, is drained by the Saskatchewan River. This watershed accounts for about one-quarter of the energy produced. The watershed is large but relatively dry, and most parts of the southern prairies contribute no water runoff. (3) The Red River watershed, which includes northern Minnesota, contributes only about 4% of energy, with most of the water coming in the month of May. The flood in 1997 changed this percentage that year, but this was an aberration. The remaining water comes from other areas in the province. This three-watershed base provides some diversification and stability to available water levels used to produce electricity.

Water levels are amplified by two other characteristics: (1) The cold temperatures reduce evaporation rates and much of the water is frozen for up to 5 months a year. (2) The fact that much of the soil is rock reduces seepage and increases runoff. Lastly, Lake Winnipeg serves as a large storage basin. This gives the Utility the capacity to produce electricity when it wishes (i.e., when prices are higher). Electric industry restructuring and deregulation is well under way in many parts of the U.S., and competitive pressures will favour those utilities with the lowest cost structures. With access to wholesale markets in the United States through the MAPP power pool, Manitoba Hydro is in a good position to sell electricity to more users in the U.S. at higher prices. The Utility's water storage capacity is a competitive advantage in trading electricity (buying surplus U.S. power at low off-peak prices, and selling its electricity during peak demand periods at higher prices). This will have the effect of ultimately raising the average unit price received for electricity sold by Manitoba Hydro.

Manitoba also has the advantage of having about 5,000 more megawatts of future generating capacity, which can be developed, virtually equal to the 5,000 megawatts of capacity presently in place. With changes to the Hydro Act, it now has the legal flexibility to form joint ventures and use third party sources to develop the power. Environmental issues are believed to be manageable, and agreements with native bands regarding new projects appear to be feasible. In addition, many of the blocking dams and road infrastructures are already in place. Interest costs are also at

record lows, which makes financing the projects more economic. However, transmission losses due to remoteness of facilities and distances between facilities and markets are large, and there is a limited market for the power domestically (there are few energy intensive industries in the province). Greenfield electric facilities powered with natural gas are still more economic today than most new hydro-based projects. However, market demand as well as commodity prices (both electricity and natural gas) will largely determine whether new projects are economic.

Manitoba Hydro-Electric Board

Balance Sheet

(\$ millions)

	Sept. 30			As at March 31		
	1999	1999	1998	1999	1999	1998
Assets:						
Cash + equivalents	30	58	141			
Accounts receivable	133	167	231			
Accrued + prepaid	155	77	78			
Current Assets	318	301	450			
Net fixed assets	6,164	5,774	5,608			
Deferred costs	468	311	243			
Pension assets	384	369	329			
Sinking funds	1,111	1,111	989			
Total	8,444	7,866	7,617			
Liabilities & Equity:						
S-T debt	346	241	498			
L-T debt due 1 yr.	159	0	0			
A/P + accrued	200	206	190			
Current Liabilities	705	447	688			
L-T debt	6,150	5,883	5,548			
Def'd + other liab	200	234	226			
Pension obligation	379	369	329			
Contributions	298	267	261			
Reserves	712	666	566			
Total	8,444	7,866	7,617			

Ratio Analysis

Liquidity Ratios

	12 Mos. ended	For years ended March 31						
	Sep-99	1999	1998	1997	1996	1995	1994	1993
Current ratio	0.45	0.67	0.65	0.26	0.38	0.47	0.94	0.38
Accumulated depreciation/Gross fixed assets	-	27.7%	26.8%	25.8%	25.1%	24.1%	22.9%	21.6%
Cash flow/Total debt (1)	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.03
Cash flow/Capital expenditures (2)	1.09	0.98	1.35	1.03	1.00	1.03	0.94	0.46
Net debt in the capital structure (1)	89.2%	88.9%	90.3%	92.1%	93.6%	94.7%	95.7%	96.9%
Average coupon on 1-t debt	-	8.06%	8.72%	8.74%	9.19%	8.49%	8.41%	8.54%
Common equity in capital structure	10.7%	11.0%	9.5%	7.8%	6.4%	5.3%	4.1%	3.1%

Coverage Ratios (3)

EBIT interest coverage	1.24	1.20	1.22	1.21	1.12	1.10	1.13	0.87
EBITDA interest coverage	1.77	1.69	1.69	1.64	1.52	1.48	1.51	1.19
Fixed charges coverage	1.20	1.17	1.19	1.18	1.11	1.09	1.12	0.89

Earnings Quality / Operating Efficiency

Power purchases/Revenues	3.5%	3.5%	0.5%	0.6%	0.7%	0.3%	1.2%	0.0%
Fuel costs/Revenues	1.6%	1.9%	0.8%	0.7%	0.7%	0.8%	0.8%	0.9%
Operating margin	44.0%	44.5%	48.2%	48.4%	47.9%	48.6%	49.8%	47.5%
Net margin (before extras.)	10.2%	9.3%	10.6%	9.9%	7.1%	5.9%	7.6%	-2.9%
Return on avg equity (before extras.)	17.4%	16.3%	21.6%	25.0%	22.0%	21.8%	35.9%	-14.1%
Profit returned to Government	51.7%	54.6%	52.5%	53.1%	60.7%	62.8%	53.0%	154.2%
Customers/Employee	-	100	99	100	98	98	95	90
GWh sold/Employee	-	7.0	7.4	7.0	6.4	6.1	6.0	5.6

Self Generation - Cost Structure (4)

	(cents per net generated kWh sold) (Tables may not add due to rounding)							
OM&A	-	0.86	0.72	0.81	0.88	0.91	0.90	0.91
Fuel	-	0.08	0.03	0.03	0.03	0.03	0.03	0.03
Variable Costs	-	0.94	0.75	0.84	0.91	0.94	0.94	0.94
Gov't Levies	-	0.46	0.42	0.42	0.43	0.39	0.33	0.29
Net Interest Expense	-	1.54	1.40	1.49	1.67	1.74	1.73	1.88
Total Cash Costs	-	2.95	2.57	2.75	3.02	3.07	3.00	3.11
Capitalized Interest/AFUDC	-	(0.08)	(0.07)	(0.06)	(0.07)	(0.06)	(0.07)	(0.14)
Depreciation	-	0.76	0.65	0.65	0.67	0.67	0.65	0.59
Total Costs	-	3.63	3.16	3.34	3.62	3.68	3.58	3.57

Purchased Power (cents per gross kWh purchased)	-	1.97	3.21	3.43	1.72	1.50	1.53	0.00
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(1) Sinking fund assets netted from debt obligations. Pension obligations treated as a debt equivalent. Contributions excluded from capital structure.

(2) Capital expenditures are net of customer contributions.

(3) Before capitalized interest/AFUDC. Interest income netted from interest expense.

(4) Internally generated energy less energy used + lost - excludes power purchases. Transmission losses apportioned relative to total energy supplied.

Manitoba Hydro-Electric Board

Income Statements

	Six months ended		For years ended March 31						
	Sep-99	Sep-98	1999	1998	1997	1996	1995	1994	1993
(S millions)									
Residential	120.5	118.7	300.0	299.1	312.2	301.1	272.0	277.2	270.5
Commercial/Industrial	189.4	190.5	400.2	393.6	387.7	377.9	358.1	356.2	349.5
Winnipeg Hydro	18.9	17.2	48.0	46.0	49.9	56.1	54.1	52.8	53.3
Sub-total domestic revenues	328.8	326.4	748.2	738.7	749.8	735.1	684.2	686.2	673.3
Exports - U.S.	159.1	165.7	279.8	278.9	252.7	237.1	241.8	221.8	105.6
- interprovincial	44.4	12.3	46.4	18.0	15.0	8.3	11.3	9.8	37.1
Sub-total export revenues	203.5	178.0	326.2	297.0	267.7	245.4	253.1	231.6	142.7
Total energy revenues	532.3	504.4	1,074.4	1,035.7	1,017.5	980.5	937.3	917.8	816.0
Other revenues	4.5	2.6	7.2	5.4	5.1	4.1	3.6	2.5	2.8
Net gas revenues	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total revenues	547.5	507.0	1,081.6	1,041.1	1,022.6	984.6	940.9	920.3	818.8
Expenses:									
Operating & administration	120.0	103.6	222.8	211.4	223.0	222.0	219.1	212.4	215.4
Power purchases	8.8	7.2	38.2	5.4	5.8	6.9	3.0	10.8	0.0
Fuel costs	6.6	8.9	20.6	8.8	7.0	7.3	7.4	7.7	7.1
Depreciation	109.1	97.6	198.0	191.0	177.4	168.5	159.8	152.5	139.4
Water rentals	23.9	27.2	50.5	55.8	51.3	47.1	45.2	44.1	45.7
Gov't guarantee fee	19.9	15.7	31.4	28.8	26.5	25.3	26.9	24.6	13.0
Taxes	20.0	19.5	38.6	37.7	36.7	35.9	22.1	9.6	9.6
Total operating costs	308.3	279.7	600.1	538.9	527.7	513.0	483.5	461.7	430.2
Operating income	239.2	227.3	481.5	502.2	494.9	471.6	457.4	458.6	388.6
LESS: Interest expense	238.1	243.9	485.6	491.5	486.5	470.9	470.9	465.6	516.4
Capitalized interest	(7.8)	(9.9)	(19.7)	(19.5)	(15.9)	(18.6)	(14.7)	(15.9)	(32.4)
Interest income	(37.2)	(38.8)	(84.5)	(80.3)	(76.8)	(50.8)	(54.7)	(60.6)	(71.4)
Net interest expenses	193.1	195.2	381.4	391.7	393.8	401.5	401.5	389.1	412.6
Pre-tax income	46.1	32.1	100.1	110.5	101.1	70.1	55.9	69.5	(24.0)
Operating Cash Flow	171.0	145.0	325.2	334.1	306.5	271.2	240.5	254.3	152.8
LESS: Capital expenditures (net of contrib)	166.0	175.0	331.6	248.1	297.1	271.2	232.6	270.1	330.6
Cash flow before working capital	5.0	(30.0)	(6.4)	86.0	9.4	0.0	7.9	(15.8)	(177.8)
LESS: Working capital	7.0	(30.0)	(40.6)	37.4	33.6	5.9	0.4	22.8	21.6
Free Cash Flow	(2.0)	0.0	34.2	48.6	(24.2)	(5.9)	7.5	(38.6)	(199.4)
LESS: Other investments	242.0	0.0	174.8	284.3	158.1	101.3	102.0	96.5	96.6
PLUS: Net financing	213.0	160.0	64.5	261.7	255.9	140.7	(210.5)	447.2	(291.1)
Net Change in Cash Flows	(31.0)	160.0	(76.1)	26.0	73.6	33.5	(305.0)	312.1	(587.1)
Unit Revenues and Costs	(cents per kWh sold) (Tables may not add due to rounding)								
Residential	-	-	6.06	6.06	5.85	5.69	5.67	5.51	5.56
Commercial/Industrial	-	-	4.14	4.17	4.23	4.23	4.24	4.19	4.18
Winnipeg Hydro (net transfer)	-	-	2.85	3.01	3.18	3.55	3.64	3.57	3.78
Provincial Revenues	4.01	3.89	4.59	4.65	4.67	4.65	4.64	4.57	4.60
Export Revenues - domestic	-	-	3.08	1.43	1.29	1.16	1.73	1.39	1.60
- United States	-	-	2.83	2.27	2.45	2.65	2.76	2.64	1.58
Total Export Revenues	3.60	2.52	2.86	2.19	2.33	2.54	2.69	2.54	1.58
Average Electricity Revenues	3.84	3.26	3.88	3.52	3.69	3.85	3.88	3.81	3.45
Ancillary Revenues	0.11	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Average Revenues	3.95	3.28	3.91	3.53	3.71	3.87	3.89	3.82	3.46
Costs:									
Operations & Administration	0.87	0.67	0.80	0.72	0.81	0.87	0.91	0.88	0.91
Power Purchases	0.06	0.05	0.14	0.02	0.02	0.03	0.01	0.04	0.00
Fuel	0.05	0.06	0.07	0.03	0.03	0.03	0.03	0.03	0.03
Variable Costs	0.98	0.77	1.02	0.77	0.86	0.93	0.95	0.96	0.94
Gov't Levies	0.46	0.40	0.44	0.42	0.42	0.43	0.39	0.32	0.29
Net Interest Expense	1.45	1.33	1.45	1.40	1.49	1.65	1.72	1.68	1.88
Cash Costs	2.89	2.50	2.90	2.58	2.76	3.00	3.06	2.96	3.11
Cash Margin	1.06	0.77	1.01	0.96	0.95	0.86	0.83	0.86	0.35
Capitalized Interest/AFUDC	(0.06)	(0.06)	(0.07)	(0.07)	(0.06)	(0.07)	(0.06)	(0.07)	(0.14)
Depreciation	0.79	0.63	0.72	0.65	0.64	0.66	0.66	0.63	0.59
Pre-tax Margin	0.33	0.21	0.36	0.38	0.37	0.28	0.23	0.29	(0.10)
Variable Costs	0.98	0.77	1.02	0.77	0.86	0.93	0.95	0.96	0.94
Fixed Costs (deprec., int + levies)	2.64	2.30	2.53	2.39	2.49	2.66	2.71	2.57	2.62
Total Costs	3.62	3.07	3.54	3.16	3.34	3.59	3.66	3.53	3.56

Manitoba Hydro-Electric Board

Operating Statistics

For years ended March 31

	1999	1998	1997	1996	1995	1994	1993	1992	1991
Electricity Sold - Break down									
Residential	4,947	4,937	5,340	5,288	4,800	5,027	4,868	4,807	4,882
Commercial/Industrial	9,657	9,430	9,159	8,931	8,454	8,493	8,352	8,199	8,145
Winnipeg Hydro (net transfer)	1,684	1,528	1,569	1,582	1,486	1,480	1,409	1,510	1,571
Total Manitoba	16,288	15,895	16,068	15,801	14,740	15,000	14,629	14,516	14,598
Export Sales - domestic	1,508	1,261	1,167	713	653	704	2,312	1,863	1,735
- United States	9,896	12,306	10,332	8,946	8,772	8,399	6,701	3,826	2,114
Total Exports	11,404	13,567	11,499	9,659	9,425	9,103	9,013	5,689	3,849
Total - GWh sold	27,692	29,462	27,567	25,460	24,165	24,103	23,642	20,205	18,447
Energy sales growth	-6.0%	6.9%	8.3%	5.4%	0.3%	1.9%	17.0%	9.5%	5.7%
Generation									
Available from Winnipeg Hydro									
Hydro	95.1%	134	134	140	140	140	140	140	140
Gas	4.7%	4,767	4,767	4,834	4,834	4,834	4,834	4,568	4,036
Oil	0.2%	236	236	237	369	369	369	369	369
Installed Capacity - Megawatts		11	15	20	20	18	19	16	17
Energy Generated - GWh		5,014	5,018	5,091	5,223	5,221	5,222	5,219	4,954
Hydro		28,303	32,806	30,711	28,129	26,932	26,189	26,540	22,591
Coal + Oil		949	301	198	228	236	277	232	294
Gross energy generated	93.8%	29,252	33,107	30,909	28,357	27,168	26,466	26,772	22,935
PLUS: Net power exchange	6.2%	1,935	168	169	401	200	705	5	812
Energy generated + purchased		31,187	33,275	31,078	28,758	27,368	27,171	26,777	20,693
LESS: Transmission loss + internal use		3,495	3,813	3,511	3,298	3,203	3,068	3,135	2,772
Total - GWh sold		27,692	29,462	27,567	25,460	24,165	24,103	23,642	18,447
Energy lost + used/Energy gen + purch		11.2%	11.5%	11.3%	11.5%	11.7%	11.3%	11.7%	12.1%
Peak demand - megawatts		3,559	3,490	3,409	3,588	3,268	3,514	3,404	3,398
Peak demand/Installed capacity		71.0%	69.5%	67.0%	68.7%	62.6%	67.3%	65.2%	79.3%
Export Interconnections									
Ontario Hydro		240	240	240	240	240	240	240	240
Saskatchewan Power		450	300	300	300	300	300	300	300
United States - MAPP		2,050	1,900	1,900	1,900	1,900	1,900	1,900	1,900
Total - megawatts		2,740	2,440	2,440	2,440	2,440	2,440	2,440	2,440
Interconnections as a % of Installed Capacity		54.6%	48.6%	47.9%	46.7%	46.7%	46.7%	46.8%	49.3%