

Cover: A 256-tonne rotor, part of the turbine generator assembly, is lifted into place at the Wuskwatim Generating Station.

Back cover: A rotor is readied for placement during construction of the Pointe du Bois Generating Station over 100 years ago. The station will celebrate a century of producing electricity in 2011.

July 31, 2011

Honourable Rosann Wowchuk Minister Charged with the Administration of the Manitoba Hydro Act Legislative Building Winnipeg, Manitoba R3C 0V8

#### Dear Minister:

I have the honour of presenting the 60th Annual Report of The Manitoba Hydro-Electric Board, together with the financial statements, for the fiscal year ended March 31, 2011.

Respectfully submitted,

Victor H. Schroeder, QC Chairman, The Manitoba Hydro-Electric Board

# **Table of contents**

Letter of transmittal Table of contents	
The power of vision	6
Corporate profile	8
Vision, mission and goals	9
Our year at a glance	10
Financial results	11
Operational statistics	12
Chairman's message	14
President and CEO's message	16
Our year in review	
Planning our power	20
Ensuring our reliability	24
Managing our energy	28
Serving our customers	32
Improving our safety	34
Protecting our environment	36
Enhancing our relationships	40
Supporting our communities	44
Corporate governance	48
Financial review	50
Management's discussion and analysis	52
Management report	67
Auditors' report	68
Consolidated financial statements	69
Consolidated financial statistics — 10-year overview	98
Operating statistics — 10-year overview	99
Major electric and gas facilities	100
Sources of electrical energy generated and purchased	101
Manitoba Hydro Generating stations and capabilities	101
Manitoba Hydro-Electric Board	102
Manitoba Hydro Senior Officers	103
Glossary	104

# THE POWER OF VISION

For over a century, power planners have turned to Manitoba's rivers to meet the demand for electricity. And why not? A myriad of drainage basins converge here, drawing water from a vast area that stretches from very near Lake Superior to the Rocky Mountains and into South Dakota. All that flowing water holds an immense amount of energy – energy that can be used to generate clean, renewable electricity. Harnessing that energy, however, has been no easy task.

Projects such as the Pointe du Bois Generating Station or the first Nelson River developments involved daunting engineering challenges and significant financial investments in the future of this province. But they were built and stand today as testaments to the foresight and ingenuity of the men and women who built them. The benefits that affordable and reliable electricity have brought to generations of Manitobans are their legacy.

Today, Manitoba Hydro is building on that legacy.

## Hydroelectric development in Manitoba



## Beginning a century of low rates

In 1904, the Winnipeg Electric Railway Company was poised to realize a virtual monopoly on the electricity supply in Manitoba. The privately-owned company was in the midst of building the province's first year-round hydroelectric generating station on the Pinawa Channel. And, people were concerned.

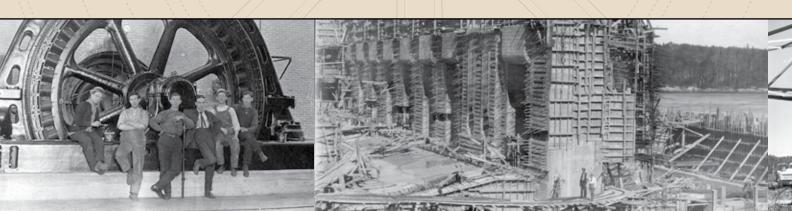
At the time consumers in Winnipeg were paying 20 cents per kilowatt hour for their electricity. Business leaders and politicians of the day worried the high rates would continue, dampening efforts to attract new industry and manufacturing to the city. One of those politicians was John Wesley Cockburn.

An alderman with Winnipeg's city council, Cockburn believed the city should build its own generating station. Winnipeg's charter, however, did not allow for the city's participation in the electricity generation business. That didn't stop Cockburn. The alderman went ahead and secured development rights to Pointe du Bois Falls on the Winnipeg River in his own name. When the city amended its charter in 1906 creating the Winnipeg Hydro Electric System, Cockburn transferred the rights. Construction of the Pointe du Bois Generating Station began three years later.

1931 - Seven Sisters

Cockburn promised Pointe du Bois would supply electricity to the citizens of Winnipeg for three cents a kilowatt hour. By the time the Pointe du Bois Generating Station began producing electricity in 1911, the rate had settled at 3.3 cents a kilowatt hour.

One hundred years later, Manitoba's electricity rates are the lowest in North America due, in part, to the vision of individuals such as John Wesley Cockburn.



1951 - Manitoba Hydro-Electric Board formed

1961 - Manitoba Power Commission integrated

## Harnessing the Nelson River

In 1963, another source of electricity for Manitoba was needed. The Winnipeg River was fully developed and the only potential hydroelectric site on the Saskatchewan River was under construction at Grand Rapids. The governments of Canada and Manitoba agreed to look for the solution.

The intent was to develop a plan for powering Manitoba's growth while creating opportunities for export electricity sales. Options included expanding the province's coal-fired thermal capacity, building nuclear facilities or developing the lower Nelson River.

This was not the first time power planners looked north to the Nelson — studies of the massive river date back to 1910. It was, however, the first time the energy that flowed between its towering banks was within reach.

The challenge had always been the immense distance that lay between the potential sites on the river and the population centres in southern Manitoba. By the 1960s that distance was no longer insurmountable, thanks to emerging high voltage transmission technologies.

Three years after beginning their study, the federal and provincial governments agreed to proceed with the Phase One Development of the Nelson River. The ambitious undertaking involved four components: construction of the Kettle Generating Station; the Churchill River Diversion; Lake Winnipeg Regulation (which would also help relieve a recurring high water problem on the lake); and a high voltage direct current (HVDC) transmission system that would be one of the longest in the world.

Widely recognized as an engineering achievement, this HVDC transmission system now carries electricity from three generating stations on the lower Nelson River — over 70 per cent of the province's supply — and supports export sales that have contributed billions of dollars to the Manitoba economy.



1978 - Bipole II

1999 - Centra Gas acquired

## Building a powerful future

In 2011, we are once again turning to Manitoba's abundant water resources to meet our province's demand for electricity. The 200-megawatt Wuskwatim Generating Station, already under construction in partnership with Nisichawayasihk Cree Nation, is expected to begin producing electricity early next year. We are also continuing the planning, design and licensing work related to the future Keeyask and Conawapa generating stations. Should firm export contracts be signed, these projects could be producing electricity as early as 2019 and 2024 respectively.

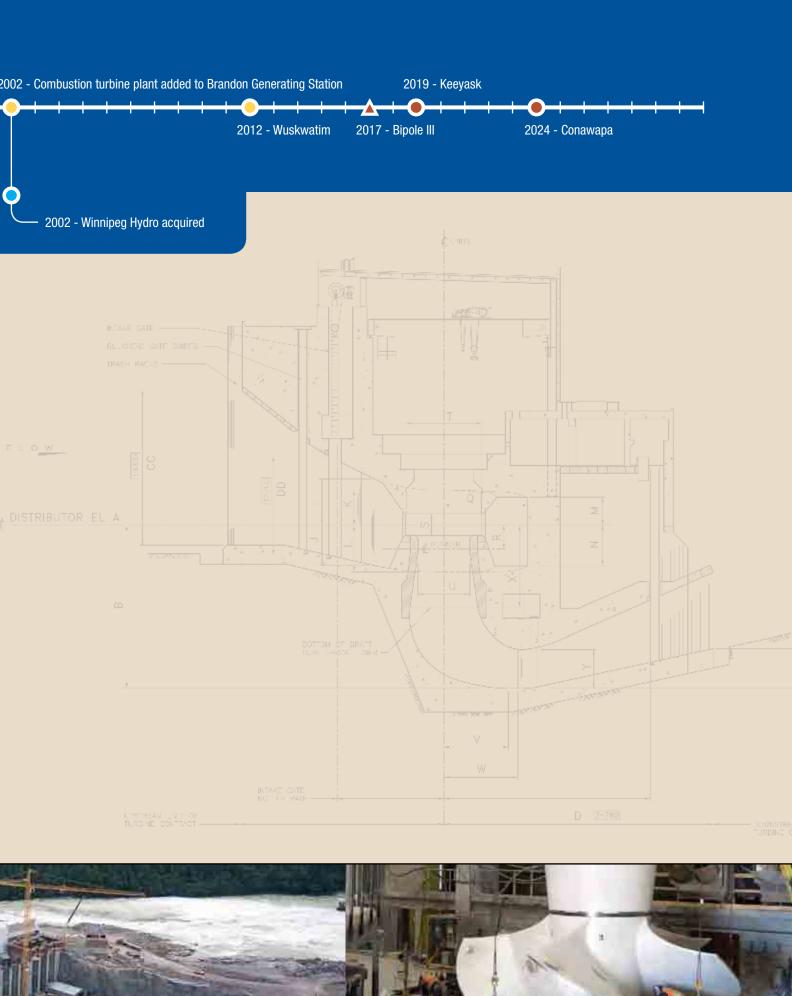
Forecasts show a need for new sources of energy beginning about 2022. By building new generation a few years in advance of that need we can capitalize on the demand that already exists outside our borders, helping to reduce the costs for Manitoba ratepayers. In addition, construction is

slated to begin in 2012 on a third high voltage direct current line that will strengthen Manitoba's transmission system by providing an additional link to northern generating stations.

We are investing in the next era of hydroelectric development now so tomorrow's generations will continue to benefit from a legacy of affordable, reliable and renewable power.







# Corporate profile

Manitoba Hydro is a provincial Crown Corporation, providing electricity to over 537 000 customers throughout Manitoba and natural gas service to over 265 000 customers in various communities. We also export and import electricity within three wholesale markets in Canada and the Midwestern United States.

We are over 6 200 people working throughout the province. With capital assets-in-service at original cost approaching \$13 billion, Manitoba Hydro is one of the largest integrated electricity and natural gas distribution utilities in Canada.

Recognized within the industry for our high level of customer service and reliability, Manitoba Hydro is also a leader in energy efficiency. We aggressively promote energy conservation through a multitude of residential, commercial and industrial Power Smart\* programs. We are also well-known for our prudent environmental practices, our positive relationships with Aboriginal peoples and our outstanding community support.

Manitoba Hydro is governed by The Manitoba Hydro-Electric Board, whose members are appointed by the Lieutenant-Governor in Council.

### **Our System**

Nearly all of the electricity Manitoba Hydro produces each year — about 30 billion kilowatt-hours on average — is clean, renewable power generated at 14 hydroelectric generating stations. The corporation also maintains two thermal generating stations and four small remote diesel generating stations. Power is also purchased from two independent wind farms in Manitoba at St. Leon and St. Joseph. We deliver electricity to our customers using over 11 700 kilometres of transmission lines and 75 000 kilometres of distribution lines.

Manitoba Hydro is also a major distributor of natural gas to customers in nearly 100 communities, primarily in the southern part of the province. Natural gas is purchased from producers in Alberta and transported to Manitoba through the TransCanada Pipeline network.

# Vision, mission and goals

### **Vision**

To be the best utility in North America with respect to safety, rates, reliability, customer satisfaction and environmental leadership; and to always be considerate of the needs of customers, employees and stakeholders.

### **Mission**

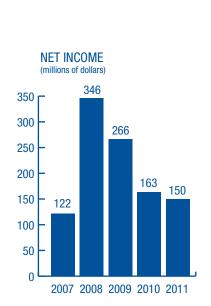
To provide for the continuance of a supply of energy to meet the needs of the province and to promote economy and efficiency in the development, generation, transmission, distribution, supply and end-use of energy.

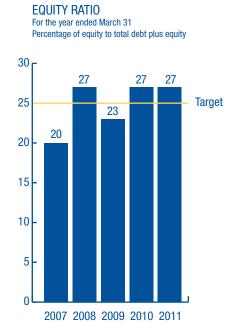
## Corporate goals

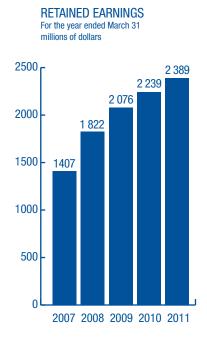
- Improve safety in the workplace.
- Provide exceptional customer value.
- Strengthen working relationships with Aboriginal peoples.
- Maintain financial strength.
- Extend and protect access to North American energy markets and profitable export sales.
- Attract, develop and retain a highly skilled and motivated workforce that reflects the demographics of Manitoba.
- Protect the environment in everything that we do.
- Promote cost effective energy conservation and innovation.
- Be recognized as an outstanding corporate citizen and a supporter of economic development in Manitoba.

- Earned \$150 million in net income for the 2010-11 fiscal year.
- Named one of the top 100 places to work in Canada.
- Concluded negotiations with Minnesota Power on a power sale worth approximately \$3 billion.
- Reached agreement with Wisconsin Public Service on a power sale worth \$500 million.

10

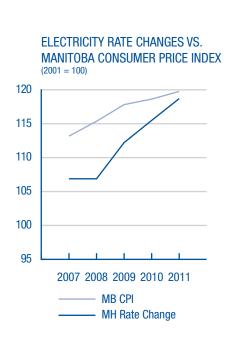


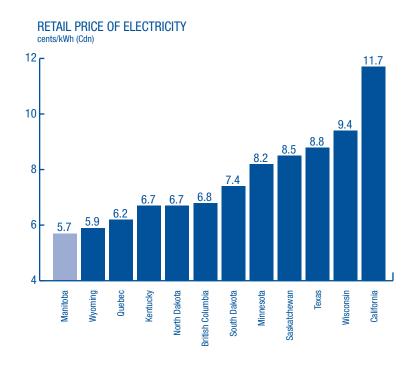




#### FINANCIAL RESULTS

	Elect	ricity	Natur	al Gas	To	tal
Revenue	2011	2010	2011	2010	2011	2010
	millions of dollars					
Manitoba	1 217	1 156	404	454	1 621	1 610
Extraprovincial	398	427	-	-	398	427
	1 615	1 583	404	454	2 019	2 037
Cost of gas sold	-	-	261	316	261	316
Expenses	1 472	1 419	136	139	1 608	1 558
Net income	143	164	7	(1)	150	163
Retained earnings	2 349	2 206	40	33	2 389	2 239





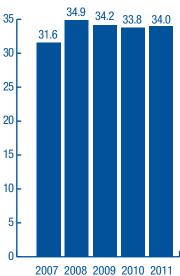
12

OPERATING STATISTICS			
	2011	2010	Increase/(Decrease)
Electrical Operations			
Sales		billions of kilowatt hours	
Manitoba sales	20.8	20.5	0.3
Extraprovincial sales	10.3	10.9	(0.6)
System supply		billions of kilowatt hours	
Generation	34.1	34.0	0.1
Purchases	0.6	0.7	(0.1)
		thousands of kilowatts	
Manitoba peak load	4 261	4 359	(98)
			(5)
National Con Delivering	2011	2010	Increase/(Decrease)
Natural Gas Deliveries		millions of cubic metres	
Residential sales	591	581	10
Commercial and industrial sales	821	803	18
Toronomedation country	1 412	1 384	28
Transportation service	584	619	(35)
	1 996	2 003	(7)

- Announced preliminary preferred route of Bipole III high voltage direct current transmission line.
- Awarded 25 000th Power Smart Home Insulation Program rebate.
- Received first power from the St. Joseph Wind Farm.

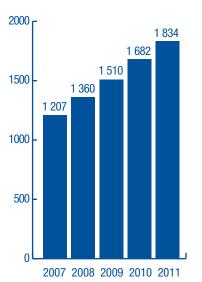
## TOTAL HYDRAULIC GENERATION

For the year ended March 31 (billions of kWh)



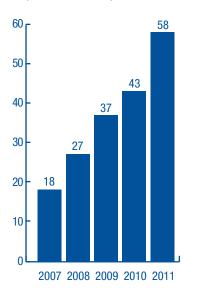
## POWER SMART SAVINGS - ELECTRICITY

For the year ended March 31 (gigawatt hours)



#### POWER SMART SAVINGS - NATURAL GAS

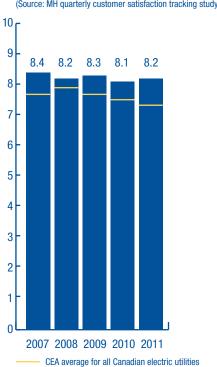
For the year ended March 31 (millions of cubic metres)



· Began work on main earth dam at the new Wuskwatim Generating Station after redirecting the flow of the Burntwood River through the station's spillway.

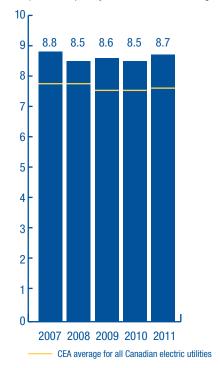
#### **CUSTOMER SATISFACTION** WITH OVERALL SERVICE

(Source: MH quarterly customer satisfaction tracking study)



#### **CUSTOMER SATISFACTION** WITH SYSTEM RELIABILITY (electricity)

(Source: MH quarterly customer satisfaction tracking study)





As I write this message, we are only a few weeks past the 60th anniversary of the first appointments to the Manitoba Hydro-Electric Board. Established by the Government of Manitoba in May 1951, that group of individuals was given the critical challenge of providing for an adequate and affordable supply of power for this province.

That mission has not changed in the intervening years and remains the focus of the board's oversight activities. This is particularly pertinent today as the corporation prepares for construction of a number of new hydroelectric projects that are necessary to meet our province's future energy needs.

The Keeyask and Conawapa generating stations, and the Bipole III transmission project, will require a significant financial investment but promise considerable benefits for generations of Manitobans. And, to ensure those benefits will also flow to current ratepayers, Manitoba Hydro is actively pursuing firm export sale contracts.

For this reason, the board was pleased to see the successful completion of negotiations for power sales to Minnesota Power and Wisconsin Public Service, which combined create an estimated \$4 billion in future value for Manitoba's hydroelectric resources. These sales, along with a previously completed sale to Northern States Power, will require development of new generation sources.

Much has already been done to lay the groundwork for the 695-megawatt Keeyask Generating Station. Over the past fiscal year, work continued preparing the Environmental Impact Statement for the project.

The Keeyask Generating Station is to be developed in partnership with four First Nations — Tataskweyak Cree Nation, War Lake First Nation, York Factory First Nation and Fox Lake Cree Nation. This continues a modern, inclusive approach to development first established by Manitoba Hydro's partnership with the Nisichawayasihk Cree Nation for building the Wuskwatim Generating Station, currently under construction in northern Manitoba.

The corporation is also working with First Nations in the vicinity of the proposed Conawapa Generating Station — including Fox Lake Cree Nation, York Factory First Nation, Tataskweyak Cree Nation, War Lake First Nation and the Shamattawa First Nation — in the planning of that project.

The board also noted good progress on the Bipole III transmission project in the fiscal year with the selection of the preliminary preferred route and the completion of a fourth round of consultation with landowners, Aboriginal communities, resource users, municipal governments and the public. The preparation of the project's Environmental Impact

Statement is nearing completion and is expected to be filed with Manitoba Conservation later this year. When completed in 2017, Bipole III will strengthen the reliability of Manitoba's high voltage direct current system and provide additional capacity for delivery of hydroelectric generation from northern sources to southern markets. Exports to southern markets help Manitoba Hydro to keep our electricity rates among the lowest in North America and will help to reduce greenhouse gas emissions.

In January, I had the opportunity to witness the start-up of Manitoba's second wind farm at St. Joseph and the first delivery of power to Manitoba Hydro — it was a remarkable sight. Now fully operational, this 138-megawatt development was made possible by the corporation's 27-year power purchase and loan agreement with the private developer, Pattern Energy.

All of these activities exemplify Manitoba Hydro's commitment to ensuring Manitobans continue to benefit from the province's abundance of carbon-free, renewable energy resources.

I would like to thank Bob Brennan, President & CEO, his executive team and the employees of Manitoba Hydro for their efforts in these endeavours and for their ongoing dedication to delivering on the mission first described in the Manitoba Hydro-Electric Board Development Act over 60 years ago.

Victor H. Schroeder, QC
 Chairman
 Manitable United Floatric Re-

Manitoba Hydro-Electric Board

# President and CEO's message

Manitoba Hydro will mark a number of anniversaries in 2011. Along with celebrating 60 years since the establishment of the Manitoba Hydro-Electric Board, this year is also the 100th anniversary of first power from our Pointe du Bois Generating Station and the 40th anniversary of the first high voltage direct current Bipole line to link the immense hydroelectric resources of the Nelson River to southern Manitoba. These projects were milestones in our province's history of hydroelectric development and key to the legacy of affordable, reliable power that has benefitted generations of Manitobans.

Today, Manitoba Hydro is building on this legacy with ongoing and planned construction projects including the Wuskwatim, Keeyask and Conawapa generating stations and the Bipole III project. We are also working to maintain the strong financial position that enables us to make these investments in our future.

In the last fiscal year the corporation saw good progress in this regard and continued to perform well against our key financial targets.

Manitoba Hydro achieved \$150 million in net revenue for 2010-11, aided by increased revenues from domestic electricity sales and the lower cost of financing.

Our debt/equity ratio sits at 73:27, better than our long-term target of 75:25. Other ratios, including interest coverage and capital coverage, also continue to meet or exceed our targets. Retained earnings — an important part of our strategy to smooth out and reduce the impact of future rate increases for our customers — also improved to \$2 389 million.

There were also a number of challenges. The year began with drought conditions which necessitated imports of electricity. We have since seen a dramatic turn in water conditions in the province and water levels have been increasing steadily. We also continued to see lower prices on the non-firm opportunity sales market due to a slow economic recovery in the U.S. and the low cost of competing natural gas-fuelled sources. However, our long-term firm export contracts helped to offset these low prices.

Long-term firm export contracts, such as those recently signed with Minnesota Power and Wisconsin Public Service, will also help to finance new hydroelectric developments. By building new generation in advance of Manitoba's needs, Manitoba Hydro can take advantage of export sale opportunities and use revenues guaranteed by long-term firm contracts to reduce the financial burden for our ratepayers. The corporation will require the construction of the Keeyask Generating Station to fulfill the obligations of these export sales.

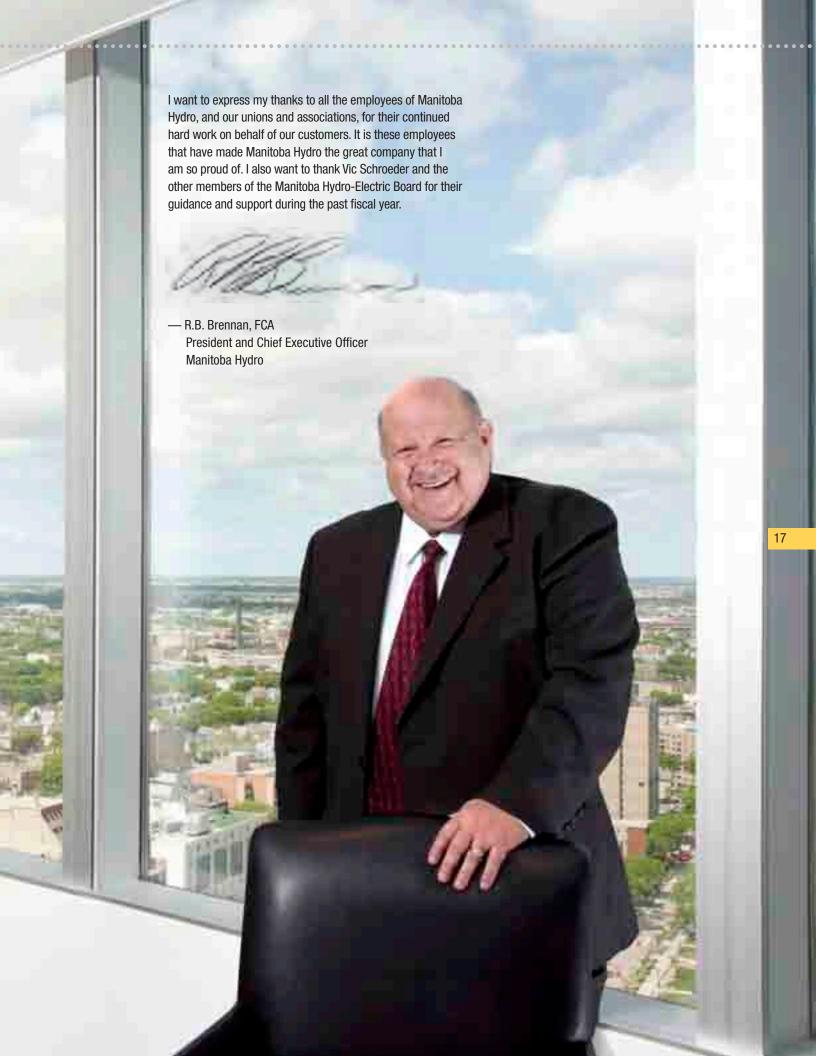
Manitoba Hydro also continues to be a leader in energy conservation; another cost-effective way for meeting future load. We now have 35 incentive-based programs and other customer service initiatives that help Manitoba homeowners and businesses to use their energy more effectively and lower their energy costs. Overall, our Power Smart initiative achieved 1 834 gigawatt hours in electricity savings and 58 million cubic metres of natural gas savings in the last fiscal year. We expect to achieve annual electricity savings of 3 408 gigawatt hours and natural gas savings of 149 million cubic metres by the 2024-25 fiscal year.

In August 2010, Manitoba Hydro and the Province of Manitoba were awarded an A-plus on the Canadian Energy Efficiency Alliance's National Energy Efficiency Report Card — the fourth consecutive time we've received the top rating. Our customer service also continues to be recognized as a leader in the industry. In July 2010, JD Power and Associates ranked Manitoba Hydro highest in customer satisfaction among large Canadian electric utilities.

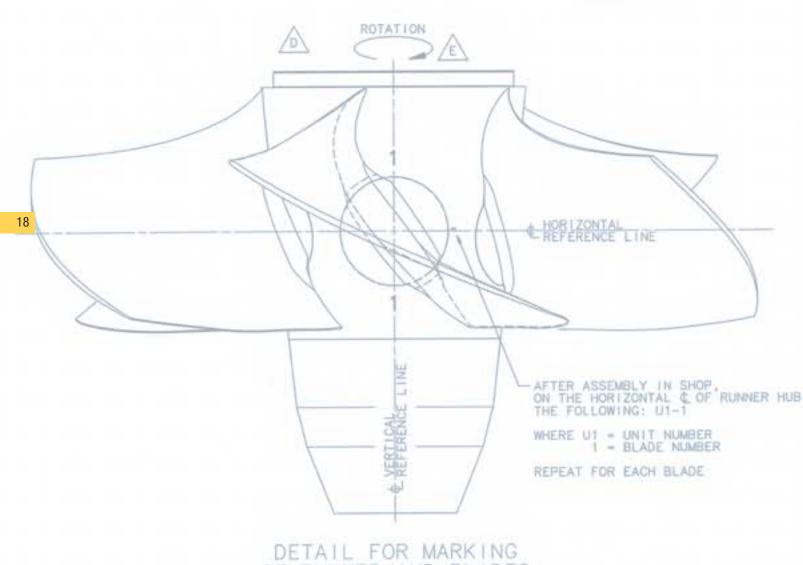
Our recruitment and retention efforts are also deliberately seeking to ensure our workforce reflects the increasing diverse community across our province and we've made substantial progress over the last decade. We continually strive to position Manitoba Hydro as an employer of choice to ensure that we can recruit and engage the wide array of talent our company needs now and in the future.

I'm also very pleased to report Manitoba Hydro's safety performance continued to improve in the last fiscal year with significant reductions in both the frequency of accidents and the severity of those accidents. Manitoba Hydro's number one goal is improving employee safety. I want to express my appreciation to all those who worked to achieve these reductions and I believe we will continue to improve our safety record.

The authors of the original Manitoba Hydro-Electric Board Development Act envisioned all Manitobans benefitting from this province's abundant hydroelectric resources. Sixty years later, Manitoba Hydro offers the lowest rates in North America and is a recognized leader in customer service, reliability and energy efficiency. And, we are well positioned to ensure Manitobans continue to benefit from an affordable, reliable and renewable source of power.







DETAIL FOR MARKING OF RUNNER AND BLADES AFTER ASSEMBLY

(SEE ALSO SECTION B-B FOR MORE MARKING INSTRUCTIONS)

SCALE 1:25





To meet the energy needs of the province efficiently and economically, Manitoba Hydro continues to make the most of Manitoba's vast hydroelectric resources. We are actively pursuing new developments and making significant capital investments in generation projects, including over \$665 million in the last fiscal year.

#### **Wuskwatim Generation Project**

Significant progress occurred at the 200-megawatt Wuskwatim Generating Station, under construction 45 kilometres southwest of Thompson. The entire flow of the Burntwood River is now passing through the station's spillway, allowing work to proceed on the main earth dam between the powerhouse and the south shoreline. Virtually all the concrete for the project, nearly 120 000 cubic metres, is in place. Inside the powerhouse, the installation of the station's three turbine generators is underway. The first of these units is scheduled to begin generating electricity in early 2012 with all units commissioned by the middle of that year.

Project employment peaked at just under 1 100 in the summer of 2010 and continues to decline as several major contracts near completion. From the start of construction in August 2006 to March 2011, almost 40 per cent of project hires have been Aboriginal and 65 per cent have been from Manitoba.

Environmental, social and economic monitoring of the project continued in parallel with construction activities. For example, water quality monitoring was conducted during the summer of 2010 as water flowed through the spillway for the first time. Using real-time monitoring methods, the diversion was controlled to minimize increased sediment in the water. Manitoba Hydro also conducted a follow-up survey of indirect and induced impacts on the local economy, specifically the contributions of the project to local employment and business opportunities in Thompson and Nelson House.

The Wuskwatim Generation Project is being developed by the Wuskwatim Power Limited Partnership, a partnership involving Manitoba Hydro and the Nisichawayasihk Cree Nation. It is the first generating station to be built in Manitoba in nearly two decades and the first formal partnership arrangement in Canada involving a First Nation and an electric utility for development of a major generating station.

### Minnesota and Wisconsin power sales

Manitoba Hydro successfully concluded negotiations for two long-term firm power sales which support the development of new generation sources in the province. The first agreement involves a 250-megawatt power sale to Minnesota Power for 15 years starting in 2020 and requires construction of a new transmission interconnection between Manitoba

and Minnesota. Revenues from this sale are forecast to be approximately \$3 billion. The second agreement is for a 100-megawatt power sale to Wisconsin Public Service for seven years starting in 2021. This sale will use existing transmission facilities and revenues are forecast to be \$500 million.

**Opposite page and below**: With nearly all the concrete structures complete, construction of the Wuskwatim Generating Station is now focused within the powerhouse and the installation of the station's three turbine generators.



# Planning our power

#### **Keeyask Generating Station**

Manitoba Hydro continued preparing the Environmental Impact Statement for the proposed Keeyask Generating Station during the past year. The Environmental Act Proposal Form is expected to be filed in 2011, triggering the formal federal-provincial review of the project. That would be followed by a filing of the Environmental Impact Statement in the spring of 2012.

The 695-megawatt station would be built on the Nelson River, 175 kilometres northeast of Thompson, in partnership with four Keeyask Cree Nations — Tataskweyak Cree Nation, War Lake First Nation, Fox Lake Cree Nation and York Factory First Nation. The current schedule targets an in-service date of 2019.

To optimize employment, training and business opportunities for the Keeyask Cree Nations and minimize risk of delays, a infrastructure agreement was negotiated to enable an early start to construction of certain infrastructure. This includes an access road and the first phase of the main construction camp. A licence for this work under the Manitoba Environment Act was received in March 2011 and the corporation expects construction to start later this summer.

#### Conawapa Generating Station

Engineering, environmental and public consultation activities for the proposed Conawapa Generating Station continued during the fiscal year. A formal planning process is also underway with the communities in the vicinity of the project, including Fox Lake Cree Nation, York Factory First Nation, the Cree Nation partners (Tataskweyak Cree Nation and War Lake First Nation) and the Shamattawa First Nation.

The 1 485-megawatt generating station would be built on the Nelson River, 320 kilometres northeast of Thompson, in the Fox Lake Resource Management Area. The Province of Manitoba and Manitoba Hydro signed a Memorandum of Understanding with Fox Lake Cree Nation in 2004 recognizing that Fox Lake will have a leading and significant role in the planning process of the Conawapa Project because of the unique effects it will have on their community.

The earliest the Conawapa Generating Station could be in-service is 2024.

Left: A member of Tataskweyak Cree Nation tags a northern pike as part of field studies related to the Keeyask Generating Station. Right: Refurbished wicket gates await installation at the Kelsey Generating Station.



#### Kelsey rerunnering

The rehabilitation of Manitoba Hydro's Kelsey Generating Station continued with work on the fifth of seven units nearing completion at the end of March 2011. The installation of different turbine runners, the modification of draft tubes to increase the volume of water flow and the rewinding of rotor and stator assemblies will significantly enhance electricity

production by making better use of the available water resource. When the last unit is back in-service at the end of 2013, Manitoba Hydro expects the \$295-million project to increase the total output of the station by approximately 84 megawatts. The work will also extend the operational life of the 50-year-old station's generating units.

#### More flexibility for Brandon's turbines

Manitoba Hydro began a one-year pilot project in February 2011 that will see two natural gas-fuelled combustion turbines at the Brandon Generating Station used to provide 100 megawatts of the corporation's emergency reserve — generation that can be added to the system quickly if there is a disruption in other sources of supply. To enable the pilot, the self-imposed minimum load limit on the units was reduced from 40 megawatts to four megawatts. This is

expected to generate millions of dollars in revenue by allowing the corporation to sell an additional 100 megawatts of low-cost hydroelectric generation, which was previously held in reserve, for the cost of running the combustion turbines at only a four-megawatt load. The pilot will confirm the actual financial benefit as well as any operational issues or environmental impacts resulting from operation of the combustion turbines.

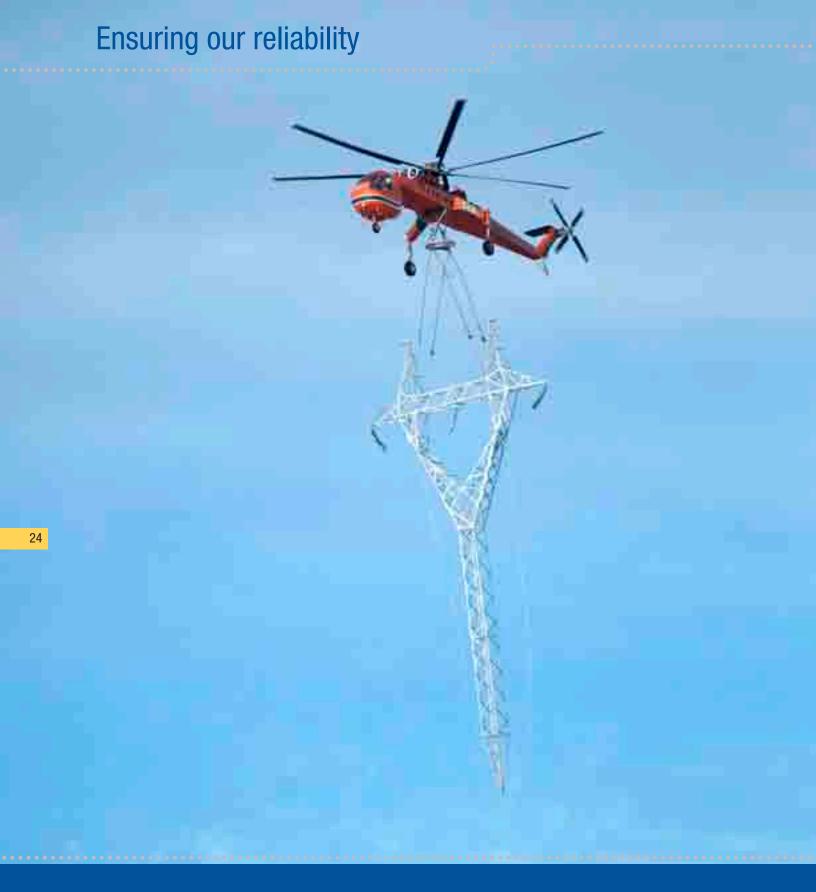
### St. Joseph Wind Farm

The first group of turbines at the province's second and largest wind farm began producing electricity in January 2011. The 138-megawatt wind farm, developed by Pattern Energy, is located about 100 kilometres south of Winnipeg. The installation began full commercial operation in early April 2011. Manitoba's first wind farm, a 99-megawatt installation in St. Leon, began operation in 2005.

Manitoba Hydro signed a 27-year power purchase agreement with St. Joseph Windfarm Inc., a subsidiary of Pattern Energy, in March 2010 to make the St. Joseph project possible. The corporation also agreed to lend St. Joseph Windfarm Inc. up to 75 per cent of the project cost to be repaid with interest over 20 years.

Below: A member of the construction crew at the St. Joseph Wind Farm stands on top of a unit's generator preparing to attach the massive rotor blade assembly.





To ensure the reliable supply of energy our customers expect, Manitoba Hydro maintains a secure and dependable delivery network. In the past fiscal year, we invested \$143 million in our transmission system, \$124 million in substations and another \$155 million in our electricity and natural gas distribution system to meet growing customer load and integrate new sources of supply.

Significant progress was made erecting the final section of a 230-kilovolt transmission line that will link the Wuskwatim Generating Station to Manitoba Hydro's transmission network. Approximately 55 kilometres of towers were installed, along with 102 kilometres of wire, for a line from Herblet Lake Station near Snow Lake to The Pas Ralls Island Station. Commissioning of this 165-kilometre line is expected to take place in the summer of 2011. Two transmission lines from Herblet Lake Station to Wuskwatim were completed last March.

Manitoba Hydro also continued work on two new high-voltage stations: one at the Wuskwatim site and another near Thompson. These facilities, and the installation of related communications equipment, are due to be completed by September 2011.

Opposite page and below: Using a helicopter as a crane in difficult to access areas helped to speed up construction of the Herblet Lake to Ralls Island transmission line.





25

# **Ensuring our reliability**

#### Riel Reliability Improvement Initiative

Work continued on creation of a new terminal station at the future site of the Riel Converter Station. The new terminal will serve as an alternate point on the 500-kilovolt transmission line between Manitoba Hydro's Dorsey Converter Station and the Forbes Station in Minnesota where electricity

imported from the United States can be injected into southern Manitoba's 230-kilovolt transmission system. This will improve the security of the province's electricity supply by protecting the corporation's ability to import power. The station is scheduled for completion in 2014.

#### Bipole III

Site Selection and Environmental Assessment activities for the new Bipole III high voltage direct current transmission project continued through the fiscal year. The preliminary preferred route for the line on the west side of the province was released in July 2010 and the fourth round of public and stakeholder consultations subsequently took place. A total of 147 events were held including meetings with municipal councils, First Nations, the Northern Association of Community Councils, as well as public and community open houses and landowner information sessions.

The environmental assessment consultation process for Bipole III was concluded in 2010 and Manitoba Hydro will submit the Environmental Impact Statement to Manitoba Conservation in 2011. The line is scheduled for completion in 2017.

Bipole III is a needed addition that will significantly strengthen the reliability of Manitoba Hydro's critical high voltage direct current system. The new line will originate at the Keewatinoow Converter Station, to be built near the Conawapa site, and terminate at the Riel Converter Station site east of Winnipeg. These new converter stations will provide important diversity to the system, particularly in southern Manitoba where the Dorsey Converter Station is currently the sole receiving point for over 70 per cent of the province's power supply.

### Linking St. Joseph wind power

Manitoba Hydro signed an interconnection and operating agreement to provide 138-megawatts of interconnection service for the privately-owned St. Joseph Wind Farm. Construction of a new four-kilometre, 230-kilovolt transmission line linking the wind farm to the corporation's Letellier

Station was completed in November 2010. An upgrade of the transmission line from Letellier to Drayton, North Dakota was completed in March 2011. An additional upgrade of the Cornwallis to Glenboro line is expected to be finished by November 2011.

Below: Crews work on a new seven-kilometre transmission line linking the Rosser and Inkster stations within the city of Winnipeg.



#### New distribution supply centres

Manitoba Hydro installed three additional distribution supply centres to service growing loads — two in Winnipeg's new Waverley West subdivision and one in Poplar Point. These centres are a low-cost alternative to traditional substations, offering increased reliability and reduced site impacts. While a traditional substation uses overhead supply lines, support structures and large fenced properties, a supply centre uses underground cable, totally enclosed padmount transformers and equipment that can be safely located in public spaces.

Developed in part by Manitoba Hydro staff, these centres continue to be a valuable means to accommodate the quickly expanding demands of developers and customers. The corporation has installed 24 distribution supply centres since 2001, with estimated savings of at least \$40 million when compared to the cost of traditional substations.

#### Power for new oil wells

Three phase distribution lines continued to be extended throughout southwestern Manitoba to service new oil wells. There are over 25 oil companies actively drilling for oil and gas in the region. Collectively, these companies plan to drill over 700 new wells in 2011 and require additional electricity supply to recover the oil and gas, and then pump the product

to market. To meet this load growth, Manitoba Hydro is erecting a total of 125 kilometres of new distribution line, rebuilding a 66-kilovolt line between Melita and Waskada, and installing five new distribution supply centres. Indications are this rate of growth in oil wells will continue through 2015.

### Making way for CentrePort Canada

Work began in October 2010 to replace a section of natural gas transmission line in the path of a new traffic overpass under construction as part of the CentrePort Canada Project. Approximately 3.5 kilometres of new 16-inch pipeline was installed around the intersection of the Perimeter Highway and

Saskatchewan Avenue in Winnipeg. The project presented a number of challenges, the most significant being the nature of the soil which included hardened clay with large rocks and boulders. The new section of pipeline was energized in March 2011.

Below: A pipeline is assembled to reroute natural gas around an overpass under construction in Winnipeg as part of the CentrePort Canada Project.



# Managing our energy



Manitoba Hydro's Power Smart program is one of the most aggressive and successful energy efficiency efforts in North America. Our investment of \$39 million in 2010-11 helped produce 1 834 gigawatt hours of electricity savings and 58 million cubic metres of natural gas savings — preventing over 1.35 million tonnes of greenhouse gas emissions.

#### Manitoba Hydro is an energy star

Natural Resources Canada named Manitoba Hydro ENERGY STAR participant of the year at the 2010 ENERGY STAR Market Transformation Awards held in Ottawa last June. The annual awards recognize efforts to encourage Canadian consumers to purchase the most energy efficient product, technology or service on the market. The corporation's Power Smart Program was recognized for its ongoing promotion of the ENERGY STAR label for a wide variety of residential and commercial products that include appliances, furnaces, boilers and lighting.

#### Home Insulation milestone

A customer in Selkirk who upgraded their attic insulation received the 25 000th rebate from Manitoba Hydro's Power Smart Home Insulation Program. The program helps Manitobans save nearly 9.5 million cubic metres of natural gas and over 35 million kilowatt hours of electricity annually, preventing the equivalent of 45 904 tonnes of greenhouse

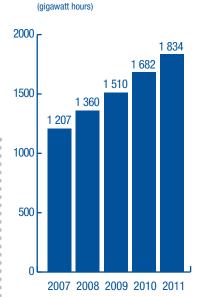
gas emissions. Participants also save a combined \$5 million annually on their energy bills. Introduced in 2004, the Power Smart Home Insulation Program offers rebates for a portion of insulation material costs to all residential customers who own a home built prior to 1999 that is their primary residence with an active Manitoba Hydro account.

#### Water and Energy Saver Program

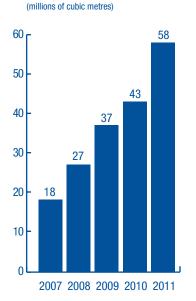
Over 30 000 residential customers received low-flow showerheads, faucet aerators and insulating pipe wrap at no charge during the fiscal year as part of Manitoba Hydro's new Power Smart Water and Energy Saver Program. Launched in September 2010, with the support of Water Stewardship

Manitoba, the program can help the corporation's customers save an estimated \$27 per year on their energy bill and approximately 9 500 litres of water. In addition, residential property managers received materials to upgrade over 12 000 multi-unit residential suites.

## POWER SMART SAVINGS - ELECTRICITY For the year ended March 31



#### POWER SMART SAVINGS - NATURAL GAS For the year ended March 31





# Managing our energy

#### Lower Income Energy Efficiency

Manitoba Hydro's Lower Income Energy Efficiency Program continued to assist customers who may not have the funds or resources to take advantage of energy efficiency opportunities. The program helps low income families reduce their utility bills and improve home comfort by providing qualifying customers with a free in-home energy review, basic energy efficiency products – such as compact fluorescent lights – and insulation upgrades. In addition, qualifying homeowners can upgrade standard efficiency natural gas furnaces to high efficiency units for \$19 per month over five years.

Increased advertising and promotion generated record interest in the program this past fiscal year, with nearly

1 800 applications received by Manitoba Hydro. The corporation also expanded partnerships with community groups, with some participating in a pilot of door-to-door promotion of the program.

Since its introduction in 2007, the Lower Income Energy Efficiency program has installed basic energy efficiency measures in over 3 000 homes, replaced 1 233 furnaces and improved insulation in 2 227 homes. The program is open to homeowners in detached or semi-detached homes with a total household income that falls under established income levels — \$51 633 for a family of four living in Winnipeg, for example.

#### Bio-fuel trial shows promise

A demonstration project evaluating the use of a renewable liquid fuel to replace fossil fuels at Tolko Industries' kraft paper mill in The Pas was a success. Pyrolysis oil is a renewable energy source derived from waste wood that could reduce Tolko's greenhouse gas emissions by up to 50 000 tonnes per year if used as a replacement for all fossil fuels currently used in the production of steam and power for the mill.

The Pyrolysis Oil Demonstration Program is a collaboration between Manitoba Hydro, Tolko and Ensyn Technologies; with financial support from the Government of Canada's Clean Energy Fund. The project is the first of five bio-energy demonstration projects to be deployed under the corporation's Power Smart Bio-energy Optimization Program. All five projects will be evaluated over the next two years and are expected to enhance the operational efficiencies of several Manitoba industrial and agricultural businesses. The Clean Energy Fund investment of \$2.5 million will be matched by Manitoba Hydro and participating customers through work-in-kind contributions and capital investments.

Left: Rosann Wowchuk, minister responsible for Manitoba Hydro, and Bob Brennan, President and CEO of Manitoba Hydro, listen to an explanation of the successful biofuel trial at Tolko Industries. Minister Wowchuk holds a sample of the Pyrolysis oil used for the trial. Right: Suzanne Chan was one of the first Manitoba homeowners to take part in the Lower Income Energy Efficiency Program and is now part of the advertising campaign creating awareness of the program.



## Helping customers save

#### Canadian National Railway

Canadian National Railway will reduce their annual electrical consumption by four million kilowatt hours and natural gas use by one million cubic metres, thanks to improvements implemented this past fiscal year with help from Manitoba Hydro. An energy management system installed over the last 15 years at Symington Rail Yard in Winnipeg with assistance of Manitoba Hydro staff, allows Canadian National to track power consumption at major load points. The consumption

data gathered is then used to develop a better understanding of energy use and to identify Power Smart opportunities for further reductions in energy costs. These projects include lighting upgrades, compressed air system upgrades and boiler replacements. The improvements implemented in the last year will provide Canadian National annual savings of more than \$300 000.

#### McCain Foods Canada

Working with Manitoba Hydro's Power Smart Performance Optimization and Natural Gas Optimization programs, McCain Foods Canada modified an existing process steam boiler to accept a dual-fuel supply allowing the company to supplement regular natural gas consumption with its own biogas.

McCain's operates a potato processing plant in Carberry which includes a wastewater treatment facility. One end-product of

treating the plant's wastewater is a high-energy biogas. By making modifications to the boiler, including a new dual-fuel burner train, instrumentation and control upgrades, and enhanced boiler software, McCain's was able to use this biogas to replace 15 per cent of their natural gas demand. These changes are expected to reduce the plant's annual natural gas consumption by over 1.2 million cubic metres.

### **Hudson Bay Mining & Smelting**

Hudson Bay Mining and Smelting worked with Manitoba Hydro's Performance Optimization Program to identify improvements to the company's compressed air system in Flin Flon. Installation of a new compressed air system at the company's copper concentrator enabled Hudson Bay to achieve load reductions of 135 kilowatts and annual energy savings of approximately 1.4 million kilowatt hours. In

addition, identification and mitigation of compressed air leaks at the company's powerhouse enabled the Flin Flon operation to shutdown a 2 000-horsepower air compressor yielding further load reductions of nearly 1 200 kilowatts and annual energy savings of 10.3 million kilowatt hours. These energy efficiencies are expected to save Hudson Bay Mining and Smelting over \$420 000 per year.

### Sysco Food Services

When Sysco Food Services expanded their Winnipeg distribution centre they took the opportunity to enhance the energy efficiency of the facility. Working with Manitoba Hydro staff, Sysco undertook upgrades to their refrigeration system, the installation of fast-acting dock doors and the use of energy efficient lighting systems that incorporate occupancy sensors

and light emitting diode exit signs. In total, Sysco Food Services achieved load reductions of approximately 300 kilowatts with annual energy savings of approximately 2.5 million kilowatt hours. These savings, coupled with additional reductions in natural gas usage, will provide the company with annual savings of approximately \$100 000.



Manitoba Hydro is regarded as an industry leader in customer satisfaction, a position confirmed again this past year by our customers who reported satisfaction levels higher than the national average for Canadian electric utilities. This performance can be attributed to a number of factors including low energy rates, superior service and our commitment to providing exceptional value.

#### Highest in customer satisfaction

Manitoba Hydro ranked highest in customer satisfaction among large Canadian electric utilities in a July 2010 report by JD Power and Associates. The marketing information firm surveyed customers served by the 16 largest electric utility companies, which collectively represent more than 12 million residential customers. The corporation performed particularly well with respect to power quality and reliability, price, corporate citizenship and communication.

#### Natural gas rates decrease

Natural gas rates continued to fall during the past fiscal year, with a residential customer's annual bill decreasing by approximately 11 per cent. Compared to March 2001, the annual residential natural gas bill in Manitoba is down by 33 per cent in absolute terms and more than 45 per cent

when adjusted for inflation. This decrease can be attributed to a decline in market prices as well as the corporation's active management of costs related to its storage and asset portfolio.

#### Review of electric rate application

In December 2009, Manitoba Hydro filed a general rate application with the Manitoba Public Utilities Board requesting electricity rate increases of 2.9 per cent in 2010-11 and 2011-12. The Public Utilities Board then chose to expand the scope of its review to include risk management practices.

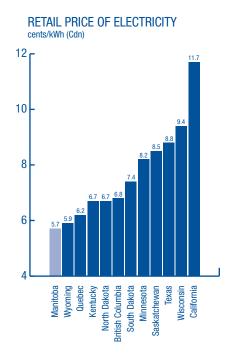
The pre-hearing and hearing process have been lengthy. The hearing of the rate application began in January 2011 and, as of the end of the fiscal year, was scheduled to continue into July 2011.

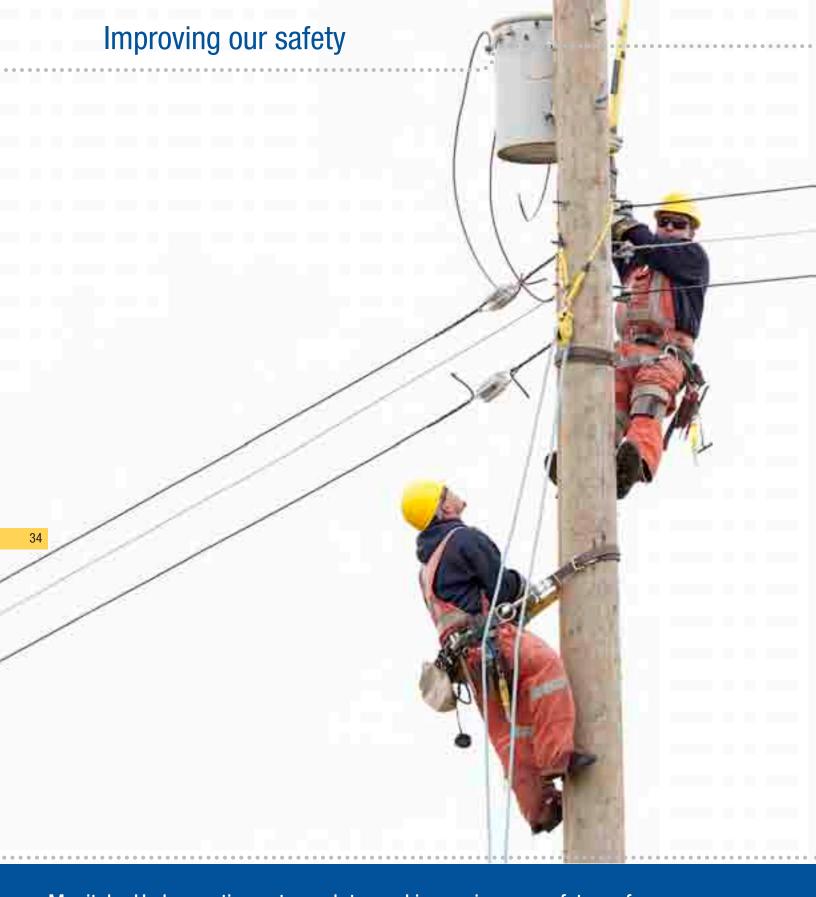
#### Electricity rate increase

In April 2010, Manitoba Hydro implemented a 2.8 per cent overall electricity rate increase. The increase was granted by the Manitoba Public Utilities Board on an interim basis and may be confirmed or varied following the completion of ongoing hearings. The corporation's electricity customers continue to enjoy the lowest rate structure in Canada and among the lowest rates in the world.

Below: Public Utilities Board hearings of Manitoba Hydro's most recent rate applications began in January 2011.







Manitoba Hydro continues to work toward improving our safety performance. In the past fiscal year, we saw significant progress in two key measures used to describe our workplace — the accident severity rate and accident frequency rate. We also continue to encourage safe practices around our facilities through ongoing initiatives such as the Youth Safety Program.

#### Farm Safety Program

Twenty-five customers chose to participate in Manitoba Hydro's Farm Safety Program which encourages farm customers to bury overhead power lines. Qualifying customers can apply to have a primary underground service installed in their farm yards and the corporation will discount 50 per cent of the cost to a maximum of \$10 000.

Manitoba Hydro supported this initiative with additional farm safety messaging throughout the year on billboards, posters and other media promoting awareness of the potential hazards associated with moving large agricultural machinery under power lines.

#### Youth Safety Program

Local employees supported the corporation's Youth Safety Program by making presentations to over 11 000 students in 174 schools across the province. The long-running program delivers electric and natural gas safety messages to grades four, five and six students.

#### Standard on electrical workplace safety

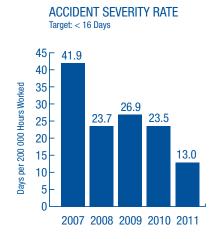
Manitoba Hydro collaborated with other electric utilities, occupational safety and health regulators, unions and manufacturers to develop the Standard on Electric Utility Workplace Safety for Generation, Transmission and Distribution, published by Underwriter Laboratories of Canada. This is the first

national standard specifically written for electrical safety in the electric utility work environment. The process provided the corporation's staff with an opportunity to compare existing best practices and procedures with others in the utility industry.

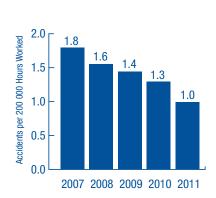
#### New lock out program

To protect Manitoba Hydro employees from contact with hazardous energy sources, the corporation implemented a new Worker Protection Code. Changes to safety legislation in 2006 led to a full review of the corporation's procedures for

de-energizing and locking equipment before beginning work. Approximately 4 300 of the corporation's employees are now trained and using the new program.



# ACCIDENT FREQUENCY RATE Target: <0.80 Accidents





Manitoba Hydro continues to be proactive in protecting the environment, striving to meet the energy needs of the province while upholding the principles of sustainable development. This approach is demonstrated in the planning and execution of our new hydroelectric and transmission projects, and in the management of our existing facilities.

#### Jenpeg Generating Station shutdown

To avoid the risk of an oil spill, all six units at the Jenpeg Generating Station were shutdown in July 2010. Alerted through a conversation that took place at a professional conference, Manitoba Hydro examined the turbine shaft on one of the units at Jenpeg and found hairline cracks. Similar cracks had resulted in the failure of units of a similar design at a generating station on the Danube River bordering Romania and Serbia.

Since there was a risk of oil spilling into the Nelson River if a shaft should fail — the hollow shafts at Jenpeg carry oil as part of the governor pressure system — the corporation

decided to immediately shutdown all units pending further inspection. Repairs to unit one at Jenpeg began in July and the unit was returned to service in August 2010. Three other units have also been returned to service within the fiscal year. The fifth and sixth units are expected to be returned to service by June 2011.

#### Lake sturgeon spawning trial

A trial underway at the Pointe du Bois Generating Station produced some evidence that lake sturgeon may be using shoals constructed in the Winnipeg River to spawn. Starting in 2009, Manitoba Hydro built four shoals downstream of the station. Special mats placed downstream of the shoals collected some eggs last season — a promising result that suggests sturgeon were spawning on or near the shoals. The shoals will be monitored again in 2011.

The research is part of the corporation's Lake Sturgeon Stewardship and Enhancement Program which helps to maintain and enhance lake sturgeon populations in areas affected by its operations. The results will be applied to the development of future hydroelectric generating stations and may be used for improving habitat near existing facilities.

Opposite page: Manitoba Hydro's Lake Sturgeon Stewardship and Enhancement Program is helping to maintain and enhance lake sturgeon populations. Below: Staff at the Jenpeg Generating Station worked throughout the year repairing cracks in the station's turbine shafts that posed a risk to the environment.



# Protecting our environment

#### Support for Lake Winnipeg research

In January 2011, Manitoba Hydro announced more than \$1.35 million in funding over six years for the Lake Winnipeg Research Consortium. The funds will support further research into ongoing water quality and biological changes in Lake Winnipeg. The consortium was formed to facilitate multi-disciplinary research into Manitoba's largest lake and to promote educational opportunities as part of the research. Manitoba Hydro is a founding member of the consortium and had provided \$1.5 million in funding prior to the announcement.

#### A systematic approach to environmental management

To further improve the management of environmental issues, Manitoba Hydro consolidated three separate ISO 14001 Environmental Management registrations into a single corporate system. The ISO 14001 standard is an internationally recognized model for: understanding and planning activities, products and services that may impact the environment; setting goals to improve environmental performance; putting

controls and measures in place to achieve those goals; checking and verifying the effectiveness of the controls; and acting when goals are not met. Manitoba Hydro's successful consolidation was confirmed by an external audit in March 2011, through which conformance to the ISO 14001 standard was verified.

Left: Manitoba Hydro provides financial support for research into Lake Winnipeg, including studies performed aboard the Namao research vessel. Right: Fish Futures Inc., which is supported through the corporation's Environmental Partnership Fund, is dedicated to increasing public awareness of the value of freshwater fisheries.



#### Commuter Challenge gold

Manitoba Hydro staff avoided nearly 37 000 kilograms of greenhouse gas emissions in just one week thanks to their participation in the 2010 Commuter Challenge. Fifteen per cent of Manitoba Hydro's employees chose to walk, cycle, carpool or bus to work during the five-day competition — earning the corporation a gold award among companies with

more than 3 000 employees. Manitoba Hydro's participation rates have grown significantly over the last five years from a rate of just over six per cent in 2005. The corporation is a long-time sponsor of the challenge, which is a national sustainable transportation event to celebrate Environment Week.

#### **Environmental Partnership Fund**

Manitoba Hydro's Environmental Partnership Fund provided assistance to over 30 community-based projects and educational ventures in 2010. One such project was the internationally recognized educational video, And This is My Garden, which promotes health, environmental and social sustainability with the story of Wabowden's community and school gardens. Other funding went to Fish Futures Inc., a

non-profit corporation dedicated to the conservation and enhancement of freshwater fisheries and sponsorship of the Churchill Northern Studies Centre and Parks Canada Science Symposium held in January 2011. Established in 1993, the fund provides one-time or multi-year contributions towards environment projects with an emphasis on education projects that focus on sustainable development.

#### Forest Enhancement Program

Forty-five tree planting initiatives were supported across the province through Manitoba Hydro's Forest Enhancement Program in 2010. In May 2010, for example, students of the Behavioural Health Foundation's K-12 School teamed up with the program to plant 60 trees of various species on their property in St. Norbert. The trees were planted in a large field behind the building to provide aesthetics for the community,

a wind break for the property and shade for the residents as well as energy conservation and educational opportunities for the students.

Since 2006, the Forest Enhancement Program has helped to plant almost 20 000 trees.

Left: The number of employees biking, bussing or walking to Manitoba Hydro's head office in downtown Winnipeg continued to grow in the fiscal year. Right: These students from Wabowden are among those featured in an educational video promoting community gardening, produced with support from the corporation's Environmental Partnership Fund.





Manitoba Hydro continues to forge productive relationships with our customers, employees, suppliers and other stakeholders, including the Aboriginal communities with whom we share waterways. One way we support this effort is by actively recruiting a highly skilled workforce that reflects the diversity of our province.

#### One of Canada's top employers

Organizers of the 2011 Canada's Top Employers Competition named Manitoba Hydro one of the nation's top 100 employers last October. The competition highlights companies who provide exceptional workplaces for employees, evaluating areas such as physical environment, work atmosphere, financial benefits and compensation, training and skills development, and community involvement. Manitoba Hydro was one of only four Manitoba companies to make the top 100 list.

#### Aboriginal business opportunities

As part of Manitoba Hydro's strategy to develop and maintain business relationships with Aboriginal companies, the corporation uses procurement strategies and policies to create opportunities for Aboriginal enterprises. Where appropriate, these strategies include restructuring tendering or creation of

smaller, custom work packages to suit the business capacity of a community in proximity to the work. During the fiscal year, Manitoba Hydro entered into over 69 contracts with Aboriginal-owned companies for work valued at nearly \$40 million.

#### Cedar Lake agreement

Manitoba Hydro signed a long-term agreement with the Chemawawin Cree Nation in January 2011, providing annual support for the Cedar Lake Community Projects. The majority of support will be directed toward community-based programming, principally shoreline debris collection and disposal within

the Cedar Lake Resource Management Area. The agreement also supports economic development and other endeavours to directly benefit the membership of the Cree Nation.

Below: Aboriginal employees make up 16 per cent of Manitoba Hydro's workforce.



# ABORIGINAL EMPLOYMENT Target: Corporate Overall 16% Target: Northern 45% 50% 40% 30% 20% 20% 2007 2008 2009 2010 2011

# **Enhancing our relationships**

#### Qualifying internationally-educated engineers

Manitoba Hydro continued to work with the University of Manitoba's Internationally-Educated Engineers Qualifications Program to support engineers who have trained abroad and want to fulfill the academic requirements of the Association of Professional Engineers and Geoscientists of Manitoba.

Since 2004, Manitoba Hydro has awarded two bursaries a year, worth \$1 500 each, to students enrolled in the program. Two graduates of the program were hired into the corporation's Internationally-Educated Engineer Career Development Program and six students also accepted co-op work terms in the fiscal year.

#### Waterways Management Program

Since 2004, Manitoba Hydro's Waterways Management Program has enhanced the safety of northern waterways with its Safe Travel Routes, Debris Management and Boat Patrol initiatives. The program employs Aboriginal people from 14 Aboriginal communities in northern Manitoba. During the 2010 season, 18 boat patrol crews travelled over 131 000 kilometres while monitoring waterways in the Saskatchewan, Burntwood, Churchill and Nelson River systems. The patrols place navigational markers, collect potential hazards such as floating logs or old nets and assist resource users.

#### **Generating Bright Futures**

Manitoba Hydro awarded six Generating Bright Futures Scholarships in the fiscal year. The scholarships, worth \$10 000 each, support Aboriginal students studying in business, engineering, information technology or other technology programs whose graduates are a focus of the corporation's recruitment strategies. The Generating Bright Futures program was added to the corporation's portfolio of scholarships and bursaries in 2009.

Left: The Generating Bright Futures program awarded six scholarships to Aboriginal students in 2010 and will award eight in 2011.

Right: The University of Manitoba's Internationally-Educated Engineers Qualifications Program helps engineers educated abroad, like Carole Kouessi who graduated in France, to achieve her academic qualifications within the Association of Professional Engineers and Geoscientists of Manitoba. A graduate of the program, Carole now works in the electrical engineering department at Manitoba Hydro.



#### Aboriginal Pre-placement Training Program

Manitoba Hydro's Southern Aboriginal Pre-placement Training, Northern Aboriginal Pre-placement Training and Aboriginal Line Trades Training programs hired a combined 32 new trainees in the fiscal year. Along with offering on-thejob training to learn required skills and competencies, the programs help provide Aboriginal candidates with mentorship and guidance that can create a path to future employment in technical trades with Manitoba Hydro. Since 2002, nearly 90 per cent of the candidates hired into pre-placement training have gone on to permanent employment with the corporation – 83 per cent of which are trades occupations.

#### Aboriginal Youth ICT Challenge

Manitoba Hydro was a sponsor of the Information and Communication Technologies (ICT) Association of Manitoba's Aboriginal Youth Challenge held in Winnipeg in June 2010. The challenge engaged Aboriginal youth with hands-on project work and provided valuable transferrable skills. It

also provided Manitoba Hydro with an opportunity to promote the corporation's training and recruitment programs for Aboriginal youth, focusing on students who have an interest in pursuing a career in Information Technology.

#### A Festival for All Nations

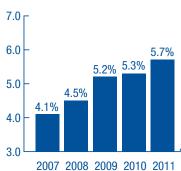
Manitoba Hydro was a major sponsor of the fifth annual Manito Ahbee Festival held in November 2010. Hosted in Winnipeg, the festival draws people from across North

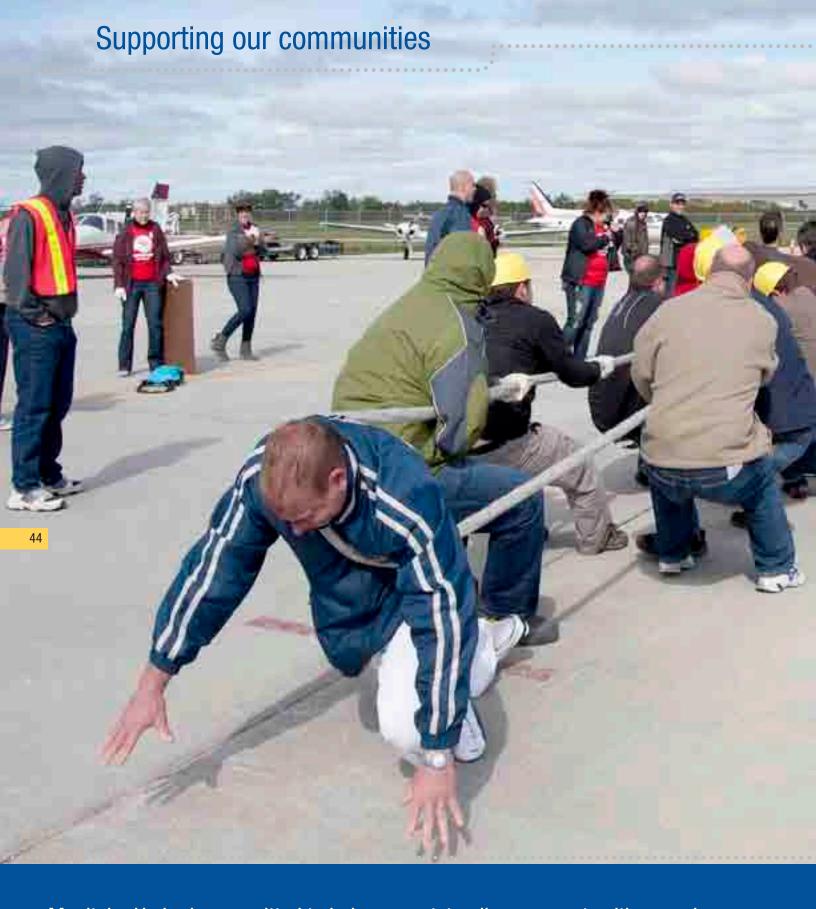
America to celebrate Aboriginal music, art and culture. The highlight of the event is the televised Aboriginal People's Choice Music Awards.

**Below**: Hiring more women into trades-related careers is one of Manitoba Hydro's recruitment strategies.



# VISIBLE MINORITIES Target: 6%





Manitoba Hydro is committed to being an outstanding corporate citizen and a supporter of economic development. We continue to actively support activities in communities throughout the province — support often enhanced by the volunteer efforts of our employees.



# Supporting our communities

#### Centrallia 2010

In October 2010, Manitoba Hydro was a sponsor of the province's first ever international business-to-business event — Centrallia. The event was a unique business networking forum that attracted over 600 business owners and leaders

from around the world to Winnipeg. More than 80 per cent of participating companies surveyed after the event reported an expectation of new business as a result of the connections made at Centrallia.

#### Manitoba Society of Seniors 55+ Games

Manitoba Hydro sponsored the Manitoba Society of Seniors 55+ Games held in Killarney in June 2010. The games are the largest annual multi-sport event for this age group in the

province. In addition, thousands participated in a variety of physical activities in communities across Manitoba to earn the right to compete in the games.

#### Festival du Voyageur

Manitoba Hydro returned as a sponsor of the Festival du Voyageur in February 2011. This 10-day event, held in Winnipeg's French quarter, celebrates the joie de vivre of the early fur traders. As the largest winter event in western Canada and the largest francophone celebration outside of Quebec, the festival is a significant contributor to the province's economy.

#### Memorial Cup

The corporation was a sponsor of the Memorial Cup, a national junior hockey tournament, held in Brandon in May 2010. The games brought in over 40 000 fans, providing a tremendous economic boon to the city of Brandon and western Manitoba. Manitoba Hydro presented the Hockey Hall of Fame exhibit,

partnered with Manitoba's Home Hardware dealers for a Power Smart consumer promotion and provided fans with branded cheering towels in exchange for a donation to the Westman Special Olympics Group.

Left: Manitoba Hydro's support for the 2010 Morris Stampede included sponsorship of the Black and White Dairy Show Junior Championship. Right: The corporation sponsored a province-wide tour of schools by a theatre troupe performing the stories of Robert Munsch.



#### Theatre for Young Audiences tour

The corporation sponsored the Prairie Theatre Exchange's Theatre for Young Audiences Tour. The touring production put on over 70 performances of *The Paper Bag Princess & More*, a collection of Robert Munsch stories, in schools across

Manitoba — 41 of which were outside of Winnipeg. Manitoba Hydro also provided a Robert Munsch book to the library of each school visited by the tour.

#### Royal Winnipeg Ballet satellite schools

Manitoba Hydro continued its sponsorship of the Royal Winnipeg Ballet School's Satellite School Program. The program offers classes in creative movement, ballet and jazz, instructed by students of the Royal Winnipeg Ballet School's

Professional Division Teacher Training Program. The classes are offered in the rural communities of Gimli, Altona, Eriksdale, St. Malo and Beausejour.

#### Winnipeg Symphony Orchestra holiday tour

The Winnipeg Symphony Orchestra's Power Smart Holiday Tour brought seasonally-themed music to five communities outside of Winnipeg in December 2010. Sponsored by Manitoba Hydro,

the orchestra performed in Steinbach, Pinawa, Winkler, Portage la Prairie and Gladstone.

Left: Manitoba Hydro is a long-time sponsor of the Royal Winnipeg Ballet School's Satellite School Program.

Right: The 101st annual Winnipeg Santa Claus Parade, presented by Manitoba Hydro Power Smart, lit up Portage Avenue in November 2010.



# Corporate governance

The board of Manitoba Hydro models its approach to corporate governance on best practices in Canada, the United States and Great Britain, as reflected in the advice and recommendations of bodies such as the Manitoba Crown Corporations Council, the Conference Board of Canada, the Corporate Executive Board and Canadian Security Administrators.

The board ensures the corporation's Code of Ethics, and ethics and social responsibility are considered in board decisions. Minutes of board meetings are public and the corporation's annual report and quarterly financial statements are tabled in the legislature. The corporation is reviewed by the Crown Corporations Council and by a committee of the legislature.

The Audit Committee of the board reviews the corporation's Integrated Financial Forecast and makes recommendations to the board. The Audit Committee reviews management's approach to managing risk. The Audit Committee also carries out special investigations and reports the results to the board. The Audit Committee obtains opinions from external auditors, internal auditors and management on the quality of internal controls.

The Human Resources and Governance Committee assists the board with human resources issues and with developing and following effective corporate governance practices.

The board and Audit Committee review management's systems for ensuring legal compliance. Conflict of interest policies are in place for members of the board, officers and employees. The board ensures that certifications with respect to the accuracy of financial statements are provided by the CEO and CFO.

The board sits as the planning committee for the corporation and approves the Corporate Strategic Plan each year. The Human Resources Committee of the board has responsibility for succession planning.

#### **Integrity Program**

Manitoba Hydro encourages employees and others to speak up on matters of concern without fear of reprisal, through its Integrity Program. All disclosures under the Integrity Program are protected by strict rules of confidentiality.

Below is a summary of all disclosures received during 2010-11 which allege wrongdoing as defined in The Public Interest Disclosure (Whistleblower Protection) Act:

Total number of disclosures received: 15
Number of disclosures ongoing from 2009-10: 6
Number of disclosures acted upon: 21
Number of disclosures not acted upon: 0
Number of investigations commenced/continued: 21
Number of disclosures that were verified: 7

#### Corrective action was taken for each verified incident, as follows:

- An employee was disciplined for mis-recording vacation and sick time for themself and their relatives,
- A First Nation terminated an employee for altering invoices payable to the corporation,
- In three instances, employees were disciplined for sexual harassment of a co-worker,
- · A contractor's employee was removed from work for the corporation for sexual harassment of employees,
- A supervisor received counselling on the need to accommodate an employee with a disability.



#### **Management's Discussion and Analysis Overview** 52 **Consolidated Results** 53 **Electricity Operations** 55 Natural Gas Operations 59 **Subsidiaries** 61 62 **Corporate Goals** 63 Report on Performance 64 Risk Management Status of Transition to International Financial Reporting Standards 65 65 Outlook **Consolidated Financial Statements** Management Report 67 68 Auditors' Report Consolidated Statement of Income 69 69 Consolidated Statement of Retained Earnings 70 Consolidated Balance Sheet Consolidated Statement of Cash Flows 72 73 Consolidated Statement of Comprehensive Income Consolidated Statement of Accumulated Other Comprehensive Income 73 74 **Notes to Consolidated Financial Statements** 10-Year Financial Statistics 98 99 10-Year Operating Statistics

# Management's Discussion and Analysis

The Management's Discussion and Analysis (MD&A) provides comments on the financial results and operational performance of Manitoba Hydro for the year ended March 31, 2011 with comparative information where applicable. The MD&A also provides an assessment of Corporate risks and contains forward-looking statements regarding conditions and events which may affect financial performance in the future. Such forward-looking statements are subject to a number of uncertainties which may cause actual results to differ from those anticipated. For context, the MD&A should be read in conjunction with the consolidated financial statements and notes.

As a provincially-owned Crown Corporation, Manitoba Hydro's mandate is to provide for the continuance of a supply of energy to meet the needs of Manitoba consumers in the most reliable, economic and environmentally sustainable manner. In fulfilling its mandate, Manitoba Hydro has established a number of goals with related measures and targets. In addition to a review of financial and operational performance, the MD&A also reviews Manitoba Hydro's progress towards achieving its strategic goals.

#### Overview

Manitoba Hydro's consolidated net income from electricity and natural gas operations for the fiscal year ended March 31, 2011 was \$150 million compared to \$163 million in the previous fiscal year. The decrease in net income of \$13 million was largely attributable to lower revenues from extraprovincial power markets where electricity prices and volumes continue to reflect economic conditions and low prices for competing energy sources.

Consolidated net income of \$150 million for the fiscal year 2011 was comprised of a \$143 million profit in the electricity sector and a \$7 million profit in the natural gas sector. The gas sector profit represented an improvement of \$8 million over the previous fiscal year in which a net loss of \$1 million was incurred. The swing in gas sector profit was mostly attributable to colder weather during the winter of 2010-11 compared to the previous year and to a gas distribution rate increase of 0.8% effective May 1, 2010.

Consolidated net income of \$150 million for 2010-11 was relatively close to Manitoba Hydro's forecasted net income of \$158 million for the year. The variance from forecasted results was largely due to lower net extraprovincial revenues partially offset by lower than forecast depreciation, financing and operating costs.

Net income of \$150 million increased the Corporation's retained earnings to \$2.4 billion at March 31, 2011. All financial targets, including debt:equity, interest coverage and capital coverage, were either met or exceeded for the year which further enhanced the Corporation's strong financial position.

#### **Consolidated Results**

The following schedule summarizes Manitoba Hydro's consolidated financial results for the fiscal year ended March 31, 2011 compared to the previous fiscal year:

	Electricity		Nat	ural Gas	Consolidated		
	2011	2010	2011	2010	2011	2010	Change
			million	s of dollars			
Revenues							
Manitoba (net of cost of gas sold)	1 217	1 156	143	138	1 360	1 294	66
Extraprovincial	398	427	-	-	398	427	(29)
	1 615	1 583	143	138	1 758	1 721	37
Expenses	1 472	1 419	136	139	1 608	1 558	50
Net income	143	164	7	(1)	150	163	(13)
Total assets	12 288	11 856	594	581	12 882	12 437	445
Retained earnings	2 349	2 206	40	33	2 389	2 239	150
Financial Ratios							
Debt:Equity					73:27	73:27	
Interest coverage					1.27	1.32	
Capital coverage					1.20	1.30	

Revenues from consolidated electricity and natural gas operations totaled \$2 019 million in 2010-11 compared to \$2 037 million in the previous fiscal year. After deducting the cost of gas sold, which is a pass-through cost with no mark-up to customers by Manitoba Hydro, revenues amounted to \$1 758 million compared to \$1 721 million in the prior year. The \$37 million or 2.1% increase in revenues was mainly attributable to increases in electricity and natural gas rates implemented during the year.

Expenses for electricity and natural gas operations increased from \$1 558 million in 2009-10 to \$1 608 million in 2010-11. The increase of \$50 million or 3.2% was largely due to a \$22 million increase in operating and administrative costs of which \$21 million was attributable to accounting changes implemented during the year, a \$15 million increase in finance expense and a \$9 million increase in depreciation and amortization costs.

Net income from electricity and natural gas operations amounted to \$150 million in 2010-11 compared to \$163 million in the previous year. The consolidated net income increased retained earnings from \$2 239 million at March 31, 2010 to \$2 389 million at March 31, 2011. As indicated in the accompanying chart, net income of \$150 million was sufficient to maintain the equity ratio at 27% at March 31, 2011 (exceeding the target equity ratio of 25%).

#### **Financing**

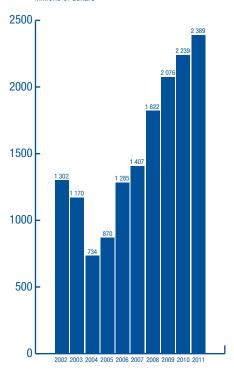
Cash provided from operations in 2010-11 was \$572 million, a decrease of \$17 million from the previous year. The decrease reflects the reduction in net income from the prior year.

Proceeds from financing arranged by the Corporation amounted to \$915 million in 2010-11 compared to \$1 425 million in the previous year. Current year proceeds were used to fund new capital requirements and to retire long-term debt maturing during the year.

During 2010-11, the Corporation retired \$723 million of debt comprised of Provincial Advances of \$634 million, HydroBonds of \$88 million and Manitoba Hydro-Electric Board Bonds of \$1 million.

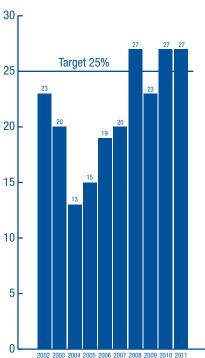
#### RETAINED EARNINGS

For the year ended March 31 millions of dollars



#### **EQUITY RATIO**

For the year ended March 31 Percentage of equity to total debt plus equity



#### **Electricity Operations**

#### **Electricity Revenues**

Electricity revenues totaled \$1 615 million, an increase of 2.0% or \$32 million over the previous year. The increase was the result of a \$61 million increase in domestic revenues partially offset by a \$29 million decrease in extraprovincial revenues. The increase in domestic revenues was primarily a result of an average 2.8% rate increase implemented on April 1, 2010 along with increased sales volumes and numbers of customers. The decrease in extraprovincial revenues was primarily due to lower prices and volumes in the U.S. markets.

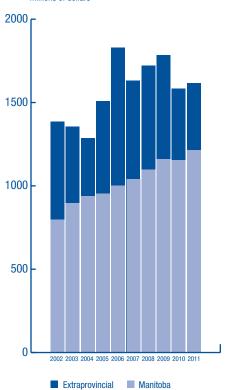
#### **Electricity Rates**

For more than the past decade, cumulative increases in electricity rates have been below the changes in the Consumer Price Index. This means that electricity consumers in Manitoba have received the substantial benefits associated with a decline in the real price of electricity. More recently, Manitoba Hydro has applied to the Public Utilities Board (PUB) for approval of average rate increases of 2.9% in 2010 and 2.9% in 2011. At this date, the public hearing regarding Manitoba Hydro's rate application is ongoing and the PUB has granted interim approval for average rate increases of 2.8% effective April 1, 2010 and 2.0% effective April 1, 2011.

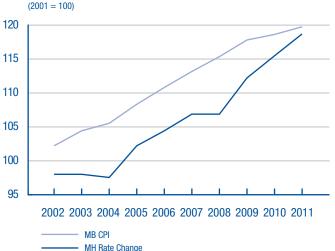
As illustrated in the accompanying chart below at right, Manitoba Hydro's domestic electricity rates continue to be the lowest in North America.

#### ELECTRICITY REVENUES

For the year ended March 31 millions of dollars



# ELECTRICITY RATE CHANGES VS. MANITOBA CONSUMER PRICE INDEX



#### RETAIL PRICE OF ELECTRICITY

Manitoba Wyoming Quebec Kentucky North Dakota British Columbia Saskatchewan Wisconsin California California

The breakdown of electricity revenues by customer segment is as follows:

#### **Electricity Revenues**

For the year ended March 31

	2011	2010	% change	2011	2010	% change	
	millions of dollars			millions of kWh			
Manitoba							
Residential	503	476	5.7	7 060	6 899	2.3	
General service	426	406	4.9	6 719	6 573	2.2	
Industrial	271	263	3.0	7 008	7 014	(0.1)	
Other revenue	17	11	54.5	-	-	-	
	1 217	1 156	5.3	20 787	20 486	1.5	
Extraprovincial	398	427	(6.8)	10 344	10 860	(4.7)	
	1 615	1 583	2.0	31 131	31 346	(0.7)	

Revenues from electricity sales in Manitoba rose to \$1 217 million from \$1 156 million, an increase of \$61 million or 5.3% over the previous year. Electricity consumption in Manitoba was 20 787 million kilowatt-hours, 301 million kilowatt-hours more than the 20 486 million kilowatt-hours consumed in the 2009-10 fiscal year. The increase in consumption was mainly due to higher heating and cooling loads in 2010-11 and an increase in the number of customers.

Revenues from sales to residential customers for 2010-11 amounted to \$503 million, an increase of \$27 million or 5.7% over the previous year. The increase was primarily due to an average 2.8% rate increase effective April 1, 2010, an increase in the number of residential customers during the year and increased consumption. At March 31, 2011 the number of residential customers was 469 635, an increase of 4 580 or 1.0% compared to the previous year.

Revenues from general service customers amounted to \$426 million in 2010-11, an increase of \$20 million or 4.9% over the previous year. The increase was mainly attributable to the April 1, 2010 rate increase, an increase of 362 small general service customers and increased consumption during the year.

Revenues from large industrial customers amounted to \$271 million, an increase of 3.0% or \$8 million over the previous year. The increase was mainly the result of the April 1, 2010 rate increase.

Extraprovincial revenues of \$398 million were \$29 million lower than in 2009-10. The decrease was primarily due to lower volumes and prices in the U.S. Of the total extraprovincial revenues, \$335 million or 84% was derived from the U.S. market, while \$63 million or 16% was from sales to Canadian markets.



#### **Electricity Expenses**

Expenses for electricity operations totaled \$1 472 million for 2010-11, an increase of \$53 million or 3.7% over the previous year. The increase in expenses was largely due to increased operating and administrative expense of \$22 million, of which

\$19 million was attributable to accounting changes implemented during the year, an increase to finance expense of \$15 million, increased depreciation and amortization expenses of \$8 million and increased capital and other taxes of \$6 million.

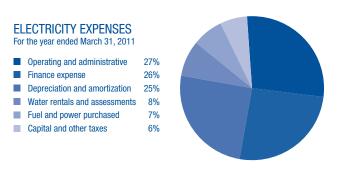
# **Electricity Expenses**For the year ended March 31

	2011	2010	% change		
	millions of dollars				
Operating and administrative	401	379	5.8		
Finance expense	388	373	4.0		
Depreciation and amortization	366	358	2.2		
Water rentals and assessments	120	121	(8.0)		
Fuel and power purchased	106	104	1.9		
Capital and other taxes	82	76	7.9		
Corporate allocation	9	8	12.5		
	1 472	1 419	3.7		

Operating and administrative expenses are comprised primarily of labour, material and overhead costs associated with operating, maintaining and administering the facilities of the Corporation. In 2010-11, operating and administrative expenses for electric operations amounted to \$401 million, an increase of \$22 million over 2009-10. The increase was the net result of \$19 million attributable to accounting changes implemented during the year, higher costs for wages, employee benefits and other expenses totalling \$20 million, and approximately \$17 million in savings related to cost constraint measures. After adjusting for accounting changes, operating and administrative expenses for 2010-11 increased by \$3 million or 0.8% over the previous year.

Finance expense totaled \$388 million in 2010-11, an increase of \$15 million or 4.0% over the prior year. The increase was primarily due to lower sinking fund investment income and the changes related to the accounting for dual currency bonds. This increase was partially offset by the impact of a stronger Canadian dollar and lower interest rates.

Depreciation and amortization expense amounted to \$366 million in 2010-11, an increase of \$8 million or 2.2% over the previous year. The increase was mainly attributable to new additions to plant and equipment coming into service.



Water rentals and assessments amounted to \$120 million in 2010-11, a decrease of \$1 million from the previous year. The decrease reflects almost identical hydraulic generation in 2010-11 compared to the previous year and a small reduction in other fees and assessments. Hydraulic generation amounted to 34.0 billion kilowatt-hours in 2010-11 compared to 33.8 billion kilowatt-hours in 2009-10.

Fuel and power purchased costs for 2010-11 amounted to \$106 million, an increase of \$2 million or 1.9% compared to the previous year. The increase was primarily the result of higher power purchases and transmission charges partially offset by lower thermal fuel purchases.

Capital and other taxes amounted to \$82 million in 2010-11, an increase of \$6 million or 7.9% compared to the previous year. This was mainly attributable to increased capital taxes related to additional capital investment and the settlement of a City of Winnipeg tax audit.

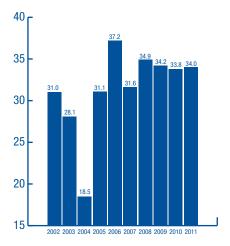
#### **Electricity Capital Expenditures**

Expenditures for capital construction totaled \$1 137 million in 2010-11 compared to \$1 038 million during the previous fiscal year. Capital expenditures for ongoing plant and equipment requirements, referred to as base capital, amounted to \$508 million, an increase of \$93 million compared to the previous year. The increase was attributable to higher expenditures on generation station and substation upgrades and a new high voltage test facility.

Major new generation and transmission capital expenditures of \$629 million included \$326 million related to the Wuskwatim Generating Station, \$85 million related to future Keeyask and Conawapa generation facilities, \$47 million related to the new Bipole III transmission line and converter stations, \$35 million for upgrades for Kelsey Generating Station, \$32 million towards the Pointe du Bois Spillway replacement and associated transmission and \$21 million for Herblet Lake to The Pas transmission.

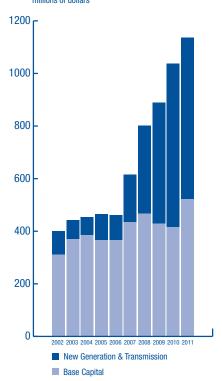
#### HYDRAULIC GENERATION

For the year ended March 31 billions of kWh



#### **ELECTRICITY CAPITAL EXPENDITURES**

For the year ended March 31 millions of dollars



#### **Natural Gas Operations**

Centra Gas is a wholly-owned subsidiary of Manitoba Hydro. Centra distributes natural gas to 241 123 residential and 24 838 commercial and industrial customers in Manitoba.

Net income in the natural gas sector in 2010-11 was \$7 million, an increase of \$8 million from the previous year loss of \$1 million. Improved net income in 2010-11 was primarily attributable to increased natural gas demand due to colder weather and to a 0.8% distribution rate increase.

Revenues from the sale and distribution of natural gas during 2010-11 were \$404 million, a decrease of \$50 million from the previous year. After deducting the cost of gas sold, which is a

pass-through cost with no mark-up by Centra, net revenues amounted to \$143 million, an increase of \$5 million from 2009-10. The increase in net revenue is a reflection of colder weather than the previous year and a 0.8% distribution rate increase implemented on May 1, 2010. Natural gas deliveries were 1 996 million cubic metres in 2010-11 compared to 2 003 million cubic metres in 2009-10.

As directed by the Public Utilities Board, \$3.8 million of revenue from 2010-11 was set aside to continue a program targeted to low-income customers and qualifying seniors on fixed incomes to assist in the replacement of low efficiency furnaces with high efficiency furnaces.

#### Natural Gas Revenues For the year ended March 31

#### Natural Gas Deliveries For the year ended March 31

	2011	2010	% change	2011	2010	% change
	millions of dollars			millions	of cubic metres	
Residential	205	222	(7.7)	591	581	1.7
Small general service	30	32	(6.3)	95	89	6.7
Large general service	120	138	(13.0)	499	485	2.9
Large commercial & industrial	25	29	(13.8)	132	128	3.1
Interruptible	18	26	(30.8)	95	101	(5.9)
T-service and other	6	7	(14.3)	584	619	(5.7)
	404	454	(11.0)	1 996	2 003	(0.3)

In accordance with Centra's quarterly rate-setting methodology, annualized rates for natural gas supplied to residential customers changed during 2010-11 as follows:

- May 1, 2010	6.4% decrease
- August 1, 2010	0.8% decrease
- November 1, 2010	5.3% decrease
- February 1, 2011	2.0% increase.

Expenses attributable to the natural gas operations, excluding cost of gas sold, amounted to \$136 million in 2010-11, which was \$3 million lower than the previous year. Decreases of \$3 million in capital and other taxes and \$1 million in finance expense were partially offset by an increase of \$1 million in depreciation and amortization.

# NATURAL GAS EXPENSES For the year ended March 31, 2011 Operating and administrative 45% Depreciation and amortization 18% Capital and other taxes 15% Finance expense 13% Corporate allocation 9%

# Natural Gas Expenses For the year ended March 31

	2011	2010	% change
	millio	ns of dollars	
Operating and administrative	61	61	-
Finance expense	18	19	(5.3)
Depreciation and amortization	25	24	4.2
Capital and other taxes	20	23	(13.0)
Corporate allocation	12	12	-
	136	139	(2.2)

Centra purchased 630 million cubic metres of natural gas based on monthly Alberta indexed pricing and 307 million cubic metres under daily Alberta indexed pricing. Centra also delivered natural gas on behalf of brokers to 27 255 (2010 – 36 447) customers receiving natural gas under Direct Purchase arrangements.

Centra introduced a fixed rate service for primary natural gas supply in 2009-10 which allows customers to fix their natural gas rates for terms of up to five years. The fixed rate service is offered to residential and commercial customers. At March 31, 2011 there were 397 customers on Centra's fixed rate service. Total natural gas deliveries under this service were 2.9 million cubic metres (2010 – 1.6 million cubic metres).

#### **Natural Gas Capital Expenditures**

Capital expenditures in the natural gas sector were \$27 million in 2010-11 compared to \$25 million in the previous fiscal year. The capital expenditure program relates to new business, system improvement and other expenditures to meet the needs of the natural gas customers.

#### **Subsidiaries**

In addition to Centra Gas, Manitoba Hydro has the following wholly-owned subsidiaries involved in energy-related business enterprises:

Manitoba Hydro International Ltd. (MHI) provides professional consulting, operations, maintenance and project management services to energy sectors world-wide, either exclusively or through partnerships. MHI also provides research and development services and products to the electrical power system industry.

Manitoba Hydro Utility Services Ltd. (MHUS) provides meter reading and related services to Manitoba Hydro, Centra Gas and other utilities.

The following table provides a summary of the financial results of the subsidiary companies excluding Centra Gas for the fiscal year ended March 31, 2011 compared to the previous fiscal year:

	M	HI	MI	HUS	Ot	her	To	tal
	2011	2010	2011	2010	2011	2010	2011	2010
			m	illions of dollars				
Revenues	33.7	24.1	5.0	5.8	0.9	0.8	39.6	30.7
Expenses	29.8	20.8	4.9	5.6	0.2	0.2	34.9	26.6
Net income	3.9	3.3	0.1	0.2	0.7	0.6	4.7	4.1

#### **Wuskwatim Power Limited Partnership**

The Wuskwatim Power Limited Partnership (WPLP) was formed to carry on the business of developing, owning and operating the Wuskwatim Generating Station and related works, excluding the transmission facilities but including all dams, dikes, channels, excavations and roads. The WPLP has two limited partners, Manitoba Hydro and Taskinigahp Power Corporation (TPC) which is owned beneficially by Nisichawayasihk Cree Nation (NCN) and a General Partner which is a wholly-owned subsidiary of Manitoba Hydro. The

Wuskwatim Generating Station is located at Taskinigup Falls on the Burntwood River about 45 kilometres southwest of Thompson, Manitoba. The first generating unit is expected to be placed in service by early 2012. The total cost of the project including transmission facilities is projected to be \$1.6 billion. At March 31, 2011 total expenditures for Wuskwatim generation and transmission facilities amounted to \$1.4 billion (2010 – \$1.1 billion).

#### **Corporate Goals**

Manitoba Hydro has the following Corporate goals:

#### Improve safety in the workplace

Achieving an accident-free workplace is Manitoba Hydro's most important goal and a critical component of all Corporate activities. Manitoba Hydro is committed to continuously improving its safety performance and is currently focusing on strategies that will further instill a safety and health culture throughout the Corporation.

#### Provide exceptional customer value

Manitoba Hydro continually strives to provide exceptional value to customers through low energy rates, a safe and secure system, high reliability and superior service.

#### Strengthen working relationships with Aboriginal peoples

Manitoba Hydro is one of the leading utilities in Canada with respect to Aboriginal representation in its workforce. The Corporation continues to place emphasis on building enduring working relationships with Aboriginal peoples through such measures as pre-employment training programs, purchasing and employment preferences, support for Aboriginal businesses and recognition of cultural requirements in the workplace.

#### Maintain financial strength

Maintaining the financial strength of the Corporation will ensure that energy rates remain low, stable and predictable. A strong financial structure also assists in protecting the Corporation and its customers from a variety of risks.

#### Extend and protect access to North American energy markets and profitable export sales

The ability to sell surplus energy into export markets has contributed significantly to low domestic rates in Manitoba. It is important that access to profitable export markets be maintained and expanded.

#### Attract, develop and retain a highly skilled and motivated workforce that reflects the demographics of Manitoba

In the increasingly competitive marketplace for talented people, Manitoba Hydro must continue to attract and retain the very best in human resources while striving to attain its diversity targets.

#### Protect the environment in everything that we do

Through careful management of new and existing facilities and infrastructure, Manitoba Hydro continues to operate in an environmentally responsible manner. Manitoba Hydro is dedicated to upholding the principles of sustainable development and to preventing or mitigating any adverse impacts from our operations.

#### Promote cost effective energy, conservation and innovation

Manitoba Hydro is recognized as a Canadian leader in promoting the wise and efficient use of energy through its Power Smart brand and continues to encourage research and development of emerging energy technologies.

#### Be recognized as an outstanding corporate citizen and a supporter of economic development in Manitoba

Manitoba Hydro and its employees continue to take leadership roles in community activities and programs throughout the province. The Corporation also works with economic development agencies to maximize wealth and jobs in Manitoba and works with customers to minimize their energy costs.

### Report on Performance

The following table summarizes the progress the Corporation is making towards achieving its Corporate goals:

	Measure	Target	2011 Performance
Safety in the Work	High-risk accidents	0	1
Environment	Accident severity rate (days per 200 000 hours worked)	<16	13.0
	Accident frequency rate (accidents per 200 000 hours worked)	<0.8	1.0
Exceptional Customer	Electricity rates	Lowest in North America	Lowest in North America
Value	Average electric customer outage time (minutes per year)	≤92	123.9
	Average electric customer outage frequency (outages per year)	≤1.3	1.4
	CEA Customer Service Index	Best in Canada	Among the best in Canada
Relationships with Aboriginal Peoples	% Aboriginal employment Corporate	16%	16%
	% Aboriginal employment Northern	45%	41%
Financial Strength	Interest Coverage	>1.20	1.27
	Capital Coverage	>1.20	1.20
	Debt: Equity	75:25	73:27
Diverse Work Force	Women	26%	24%
	Persons with disabilities	6%	5%
	Visible minorities	6%	6%
Protecting the Environment	% Generation from Renewable Resources	>99%	99.8%
	Environmental component of CEA Customer Service Index	≥8.5	7.8
Sustainability & Energy Conservation	Electric energy saved per year	1 736 GWh	1 834 GWh
Corporate Citizenship &	CEA Public Attitude Index	≥8.5	7.8
Economic Development	Corporate Citizenship Index	≥8.2	7.5

#### Risk Management

Manitoba Hydro faces a number of risks in the fulfillment of its mandate. These risks are managed through a systematic, proactive and integrated process designed to balance the following objectives:

- identifying threats that affect the achievement of the Corporation's mission and mandate;
- mitigating the consequences of negative occurrences; and
- taking advantage of opportunities to provide benefits to all stakeholders.

Most risk management efforts are focused on reducing the likelihood of negative events occurring. However, the Corporation also has plans in place to reduce the consequences should a negative event occur. These plans are under continual assessment. In addition, all safety and reliability risks are managed through strict adherence to design, construction and operating standards and practices together with extensive public education and employee training programs. A comprehensive Emergency Response Plan is also in place to ensure an effective and coordinated response to possible emergencies or disasters.

The financial and operational risks associated with the management of an integrated electricity and natural gas utility are significant. These risks include the impacts of weather on supply and demand, price and market uncertainties, interest, inflation and foreign exchange rates, skilled labour availability and costs, aging infrastructure maintenance and replacement, increasing regulatory, environmental and legal requirements, and accelerated technological change. Manitoba Hydro manages these risks through an integrated control framework and through the maintenance of an adequate level of retained earnings.

Manitoba Hydro's major financial and operational risks are quantified in the following table:

Risk	Potential Impact
Infrastructure	Greater than \$2.0 billion
Drought	Greater than \$2.0 billion for a five year drought
Loss of export market	Greater than 30% of electricity revenue
Interest rates	Approximately \$430 million for a 1% change over ten years
Foreign exchange rates	Approximately \$125 million for a \$0.10 U.S. change over 10 years

To provide added assurance that Manitoba Hydro's major risks are being appropriately managed, Manitoba Hydro conducted a comprehensive risk management review with the assistance of two external consulting firms – ICF International and KPMG. While opportunities for improvement were identified principally in the area of procedure documentation, both external consultants concluded that Manitoba Hydro's hydroelectric operational risks are well-managed.

#### Status of Transition to International Financial Reporting Standards (IFRS)

In February 2008, the Canadian Accounting Standards Board (AcSB) announced that publicly accountable enterprises will be required to adopt IFRS in place of Canadian Generally Accepted Accounting Principles (GAAP) for fiscal years beginning on or after January 1, 2011.

In September 2010, the AcSB implemented changes to Part 1 of the CICA handbook – Accounting, allowing qualifying entities with rate regulated activities to defer their adoption of IFRS for one year. Manitoba Hydro meets the AcSB criteria for deferral and will adopt IFRS for its 2012-13 fiscal year with comparative information presented for the 2011-12 fiscal year.

The Corporation expects the transition to IFRS to impact accounting, financial reporting and related information systems. To facilitate the conversion process, Manitoba Hydro has assembled a project team, engaged external advisors and established a formal project governance structure with the formation of a Steering Committee consisting of an executive sponsor and senior levels of management from throughout the Corporation. Regular reporting of the project status is provided to the Audit Committee of the Manitoba Hydro-Electric Board.

Although IFRS and Canadian GAAP are premised on a similar conceptual framework, there are a number of differences with respect to recognition, measurement and disclosure. The areas with the highest potential to impact Manitoba Hydro include property, plant and equipment, regulatory assets and liabilities, employee benefits and the transitional requirements upon the adoption of IFRS under the provisions of IFRS 1, First-Time Adoption of IFRS.

At this time, it is uncertain as to what position, if any, the International Accounting Standards Board (IASB) might take to address accounting for the effects of rate-regulated activities. In addition, the IASB has a number of on-going projects on its agenda which may result in changes to existing IFRS prior to the commencement of Manitoba Hydro's 2012-13 fiscal period. Manitoba Hydro continues to monitor and evaluate the impacts of current and prospective IFRS on its accounting policies, financial position, and business activities.

#### Outlook

Manitoba Hydro ended fiscal 2010-11 with record high water storage levels. With normal precipitation over the coming months, hydraulic generation should exceed the historical average and financial results should continue to be strong. Although there have been signs of an economic recovery in export markets, the rate of the recovery remains a significant uncertainty, particularly in the U.S., where natural gas costs and new wind generation projects are reducing market prices for electricity. Based on current conditions, Manitoba Hydro is projecting that its net income for 2011-12 will be similar to the net income achieved in 2010-11.

The 200-megawatt Wuskwatim Generating Station, which is located on the Burntwood River 45 kilometres southwest of Thompson, is being developed by the Wuskwatim Power Limited Partnership, a partnership involving Manitoba Hydro and the Nisichawayasihk Cree Nation. It is the first generating station to be built in Manitoba in nearly two decades and the first formal partnership arrangement in Canada involving a First Nation and an electric utility for development of a major generating station. Significant progress occurred during the year with the majority of civil works being completed and the installation of the three turbine generators underway. The first generating unit is expected to be placed in service by early 2012 with all units commissioned by the middle of that year.

Manitoba Hydro is actively planning a number of major projects such as Keeyask and Conawapa generating stations and the Bipole III transmission line in order to further improve electrical system reliability, to meet the future energy needs of the province and to take advantage of export opportunities. These plans will involve the investment of approximately \$18 billion over the next 10 years which will generate significant returns for Manitobans over ensuing decades. Construction of new generation projects will only proceed once firm export sales contracts are secured, extensive consultations with stakeholders and First Nations are concluded and environmental and regulatory approvals are received.

#### Outlook (continued)

The proposed 695-megawatt Keeyask Generating Station would be built on the Nelson River, 175 kilometres northeast of Thompson, in partnership with four Keeyask Cree Nations — Tataskweyak Cree Nation, War Lake First Nation, Fox Lake Cree Nation and York Factory First Nation. Work continued on the joint environmental evaluations, on the engineering, licensing and agreements to develop the Keeyask Infrastructure Project, and on the planning for the Keeyask Generating Station. A licence for an access road and the first phase of the main construction camp was received in March of 2011 and the Corporation expects construction of this work to start later this summer. The current schedule targets an in-service date for the generating station of 2019.

The proposed 1 485-megawatt Conawapa generating station would be built on the Nelson River, 320 kilometres northeast of Thompson, in the Fox Lake Resource Management Area. A formal planning process is underway with the communities in the vicinity of the project, including Fox Lake Cree Nation, York Factory First Nation, the Cree Nation partners (Tataskweyak Cree Nation and War Lake First Nation) and the Shamattawa First Nation. Engineering, environmental and public consultation activities continued during the fiscal year. The earliest the Conawapa Generating Station could be in-service is 2024.

The Bipole III project involves the construction of a new 500-kV high voltage direct current transmission line along with new converter stations, one in the north and another at the southern receiving end. The project is required to improve system reliability and to provide additional capacity for delivery of existing and proposed hydroelectric generation to southern markets. The preliminary preferred route was released in 2010, the final round of consultation was completed in 2010 and the environmental impact statement is scheduled for submission to regulatory authorities in the fall of 2011. Bipole III is scheduled for completion in 2017.

A 138-megawatt wind farm located near St. Joseph, Manitoba owned by Pattern Energy and operated by St. Joseph Windfarm Inc. commenced commercial operation in April 2011. The wind farm consists of 60 wind turbines each with a capability of 2.3 megawatts. Financing for the wind farm was provided partly by Manitoba Hydro in accordance with an agreement to lend the project up to \$250 million to be repaid, with interest, over 20 years. In addition, Manitoba Hydro will provide access to a \$10 million reserve loan facility. The output of the wind farm will be purchased by Manitoba Hydro under a 27-year power purchase agreement.

In May 2011, Manitoba Hydro announced the signing of new export sale contracts with Minnesota Power and Wisconsin Public Service. The Minnesota Power contract includes a 250-megawatt System Power Sale Agreement and a 250-megawatt Energy Exchange Agreement commencing June 1, 2020 and ending May 31, 2035. The Wisconsin Public Service contract is for a 100-megawatt System Power Sale Agreement commencing June 1, 2021 and ending May 31, 2029. Both Power Sale Agreements and the Energy Exchange Agreement are subject to the construction of Keeyask Generating Station and the required regulatory and other approvals in Canada and the U.S. In addition, the Minnesota Power Agreements require Minnesota Power to construct a new interconnection with Manitoba. Combined with the previously announced sale to Northern States Power, these sales have a total value exceeding \$4 billion.

Manitoba Hydro's Power Smart Program continues to serve residential, commercial and industrial customers with a total of 35 programs and initiatives. The highly successful Power Smart Program continues to encourage all customer sectors to use energy more efficiently. These efforts work towards making permanent shifts in the Manitoba marketplace for long-term adoption of energy efficient technologies and practices. The Power Smart Program is projected to achieve electric energy and demand savings of 3 408 GWh/year and 918 MW by 2024-25. Natural gas savings over that same time period are projected to be 149 million cubic metres. The overall Power Smart Program is expected to reduce greenhouse gas emissions by over 2.6 million tonnes annually while providing Manitobans with lower energy bills from the installation of energy savings measures and the continued sale of the conserved hydraulic energy on export markets.

# Management Report

#### MANAGEMENT REPORT

For the year ended March 31, 2011

The accompanying consolidated financial statements and all additional information contained in the Annual Report are the responsibility of management and have been approved by the Manitoba Hydro-Electric Board. The financial statements have been prepared by management in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. In management's opinion, the consolidated financial statements have been properly prepared within reasonable limits of materiality, incorporating management's best judgment regarding all necessary estimates and all other data available up to June 23, 2011. The financial information presented elsewhere in the Annual Report is consistent with that in the consolidated financial statements.

Management maintains internal controls to provide reasonable assurance that the assets of the Corporation are properly safeguarded and that the financial information is reliable, timely and accurate. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its finding to management and to the Audit Committee of the Board.

The responsibility of the external auditors, Ernst & Young LLP, is to express an independent, professional opinion on whether the consolidated financial statements are fairly presented in accordance with Canadian generally accepted accounting principles. The Auditors' Report outlines the scope of their examination and their opinion.

The Audit Committee of the Board is comprised of five members, the majority of whom are members of the Manitoba Hydro-Electric Board. The Audit Committee of the Board meets with the external auditors, representatives of the Auditor General's Office, the internal auditors and management to satisfy itself that each group has properly discharged its respective responsibility and to review the consolidated financial statements before recommending approval by the Board. The internal and external auditors have full and unrestricted access to the Audit Committee, with or without the presence of management. The Board reviews the Annual Report in advance of its release and approves its content and authorizes its publication.

On behalf of management:

R. B. Brennan, FCA
President and Chief Executive Officer

Winnipeg, Canada June 23, 2011 Muse Warder

V. A. Warden, CMA, FCMA Senior Vice-President, Finance & Administration and Chief Financial Officer

## Auditors' Report

To the Board of Directors of Manitoba Hydro-Electric Board

We have audited the accompanying consolidated financial statements of Manitoba Hydro-Electric Board, which comprise the consolidated balance sheet as at March 31, 2011 and the consolidated statements of income, comprehensive income, accumulated other comprehensive income, retained earnings and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of **Manitoba Hydro-Electric Board** as at March 31, 2011 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Winnipeg, Canada, June 23, 2011. **Chartered Accountants** 

Ernst & young LLP

## **Consolidated Financial Statements**

## CONSOLIDATED STATEMENT OF INCOME

For the year ended March 31

		Notes	2011	2010
			m	nillions of dollars
Revenues		_		
Electric	Manitoba		1 217	1 156
	Extraprovincial	3	398	427
Gas	Commodity		261	316
	Distribution		143	138
			2 019	2 037
Cost of gas so	old		261	316
			1 758	1 721
Expenses				
Operating and	d administrative		462	440
Finance exper	nse	4	425	410
Depreciation a	and amortization		393	384
Water rentals	and assessments	5	120	121
Fuel and pow	er purchased		106	104
Capital and of	ther taxes		102	99
			1 608	1 558
Net Income			150	163

The accompanying notes are an integral part of the consolidated financial statements.

## **CONSOLIDATED STATEMENT OF RETAINED EARNINGS**

For the year ended March 31

Notes	2011	2010
	n	nillions of dollars
	0.000	0.070
Retained earnings, beginning of year	2 239	2 076
Net income	150	163
Retained earnings, end of year	2 389	2 239

## **CONSOLIDATED BALANCE SHEET**

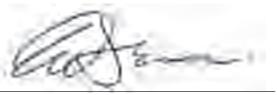
As at March 31

	Notes	2011	2010
		n	nillions of dollars
Assets			
Property, Plant and Equipment			
In service	6	12 967	12 688
Less accumulated depreciation	6	4 752	4 612
		8 215	8 076
Construction in progress	6	2 739	2 052
		10 954	10 128
Current Assets			
Cash and cash equivalents		70	174
Accounts receivable and accrued revenue		403	365
Interest receivable		4	6
Materials and supplies, at average cost	7	85	98
		562	643
Other Assets			
Sinking fund investments	8	282	822
Goodwill and intangible assets	9	260	253
Regulated assets	10	309	299
Other deferred assets	11	515	292
		1 366	1 666
		12 882	12 437

## Approved on behalf of the Board:



Victor H. Schroeder, QC Chair of the Board



William Fraser, FCA Chair of the Audit Committee

Notes 2011 2010 millions of dollars **Liabilities and Equity Long-Term Debt** 8 335 7 406 Long-term debt net of sinking fund investments 8 282 822 Sinking fund investments shown as assets 12 8 617 8 228 **Current Liabilities** 327 Accounts payable and accrued liabilities 13 336 Accrued interest 95 91 Current portion of long-term debt 12 30 310 461 728 Other Liabilities 207 207 Asset purchase obligation 14 Other deferred liabilities 15 546 455 753 662 295 295 **Contributions in Aid of Construction Equity** Retained earnings 2 389 2 2 3 9 367 Accumulated other comprehensive income 285 2 524 2 756 12 882 12 437

## CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended March 31

	2011	2010
		millions of dollars
Operating Activities		
Cash receipts from customers	2 029	2 110
Cash paid to suppliers and employees	(1 043)	(1 080)
Interest paid	(438)	(475)
Interest received	(430)	34
Cash provided by operating activities	572	589
cash provided by operating activities	312	
Financing Activities		
Proceeds from long-term debt	915	1 425
Sinking fund withdrawals	646	263
Retirement of long-term debt	(723)	(452)
Notes payable	-	(100)
Other	(157)	(12)
Cash provided by financing activities	681	1 124
Investing Activities	(	// <b></b> >
Property, plant and equipment, net of contributions	(1 166)	(1 068)
Sinking fund payments and deposits	(119)	(537)
Other	(72)	(93)
Cash used for investing activities	(1 357)	(1 698)
Net (decrease) increase in cash and cash equivalents	(104)	15
Cash and cash equivalents, beginning of year	174	159
Cash and cash equivalents, end of year	70	174

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended March 31

	2011	2010
		millions of dollars
Net income	150	163
Other comprehensive income		
Unrealized foreign exchange gains on debt in cash flow hedges	79	448
Realized foreign exchange losses on debt in cash flow hedges reclassified to income	1	6
Unrealized fair value gains on available-for-sale U.S. sinking fund investments	2	-
	82	454
Comprehensive income	232	617

## CONSOLIDATED STATEMENT OF ACCUMULATED OTHER COMPREHENSIVE INCOME

For the year ended March 31

	2011	2010
		millions of dollars
Balance, beginning of year	285	(169)
Other comprehensive income (loss)	82	454
Balance, end of year	367	285

### NOTE 1 SIGNIFICANT ACCOUNTING POLICIES

Consolidation - The consolidated financial statements include the financial statements of the Manitoba Hydro-Electric Board (Manitoba Hydro or the Corporation) and its subsidiaries. For purposes of consolidation, all significant intercompany accounts and transactions have been eliminated.

Rate-Regulated Accounting - The prices charged for the sale of electricity and natural gas within Manitoba are subject to review and approval by the Public Utilities Board of Manitoba (PUB). The rate-setting process is designed such that rates charged to electricity and natural gas customers recover costs incurred by Manitoba Hydro in providing electricity and gas service. As permitted under Canadian Generally Accepted Accounting Principles (GAAP), the Company applies standards issued by the Financial Accounting Standards Board (FASB) in the United States as another source of GAAP. FASB Accounting Standards Codification Section 980 – Regulated Operations, represents the standard Manitoba Hydro applies for rate-regulated accounting. These accounting policies differ from enterprises that do not operate in a rate-regulated environment. Such accounting policies allow for the deferral of certain costs or credits which will be recovered or refunded in future rates. These costs or credits would otherwise have been included in the determination of net income in the year that the cost or credit is incurred. Manitoba Hydro refers to such deferred costs or credits as regulated assets (Note 10) or regulated liabilities (Note 13) which are generally comprised of the following:

- Power Smart programs The costs of the Corporation's energy conservation programs, referred to as Power Smart, are deferred and amortized on a straight-line basis over a period of 10 years.
- Site restoration costs Site restoration costs, other than those for which an Asset Retirement Obligation (ARO) has been established, are deferred and amortized on a straight-line basis over a period of 15 years.
- Deferred taxes Taxes paid by Centra Gas (July 1999) as a result of its change to non-taxable status on acquisition by Manitoba Hydro, have been deferred and are being amortized on a straight-line basis over a period of 30 years.
- Acquisition costs Costs associated with the acquisition of Centra Gas (July 1999) and Winnipeg Hydro
   (September 2002) have been deferred and are being amortized on a straight-line basis over a period of 30 years.
- Purchased gas variance accounts (PGVA) Accounts are maintained to recover/refund differences between the actual
  cost of gas and the cost of gas incorporated into rates charged to customers as approved by the PUB. The difference
  between the recorded cost of natural gas and the actual cost of natural gas is carried as an account receivable/payable,
  and recovered or refunded in future rates.
- Regulatory costs Costs associated with regulatory hearings are deferred and amortized on a straight-line basis over periods up to five years.

Manitoba Hydro's other significant accounting policies are as follows:

## a) Property, Plant and Equipment

Property, plant and equipment is stated at cost which includes direct labour, materials, contracted services, a proportionate share of overhead costs and interest applied at the average cost of debt. Interest is allocated to construction until a capital project becomes operational or a decision is made to abandon, cancel or indefinitely defer construction. Once the transfer to in-service property, plant and equipment is made, interest allocated to construction ceases, and depreciation and interest charged to operations commences.

## b) **Depreciation**

Depreciation is provided on a straight-line remaining-life basis. The major components of generating stations are depreciated over the lesser of the remaining life of the major component or the remaining life of the associated generating station.

The range of estimated service lives of each major asset category is as follows:

 Generation
 -Hydraulic
 45 - 100 years

 -Thermal
 25 - 65 years

 Transmission
 -Lines
 40 - 85 years

 -Stations
 20 - 57 years

 Distribution
 15 - 65 years.

Provision for removal costs of major property, plant and equipment is charged to depreciation expense on a straight-line basis over the remaining service lives of the related assets. Retirements of these assets, including costs of removal, are charged to accumulated depreciation with no gains or losses reflected in operations. The estimated service lives and removal costs of the assets are based upon depreciation studies conducted periodically by the Corporation.

## c) Asset Retirement Obligations

Asset retirement obligations are measured initially at fair value in the period in which the obligations are incurred, provided that a reasonable estimate of the fair value can be made. The present value of the estimated retirement cost is added to the carrying amount of the related asset. In subsequent periods, the estimated retirement cost is amortized over the useful life of the asset and the carrying value of the liability is increased to recognize increases in the liability's present value with the passage of time.

## d) Materials and Supplies

Materials and supplies are valued at the lower of average cost or net realizable value.

## e) Contributions in Aid of Construction

Contributions are required from customers whenever the costs of extending service exceed specified construction allowances. Contributions are amortized on a straight-line basis over the estimated service lives of the related assets.

## f) Revenues

Customers' meters are read and billed on a cyclical basis. Revenues are accrued in respect of energy delivered for those cycles not yet billed.

## g) Cost of Gas Sold

Cost of natural gas sold is recorded at the same rates charged to customers.

## h) Employee Future Benefits

Manitoba Hydro provides future benefits, including pension and other post-retirement benefits, to both existing and retired employees. Pension plans include the Civil Service Superannuation Board (CSSB) plan, three Centra Gas curtailed pension plans and the Winnipeg Civic Employee Benefits Program (WCEBP).

The costs and obligations of pension and other post-retirement benefits are calculated by an independent actuary using the accrued benefit actuarial cost method and reflect management's best estimate of future compensation increases, service lives, inflation rates and expected rate of return on plan assets. Pension expense is comprised of the cost of pension benefits provided during the year, the amortization of past service benefits, experience gains and losses and expected returns on fund assets net of interest on the obligation. The amount of expected returns on fund assets is based on market related values using a five-year moving average. The unamortized present value of past service benefits and actuarially determined experience gains or losses are recognized in the financial statements as assets or liabilities.

The Corporation utilizes the "corridor method" of amortizing actuarial gains and losses. The amortization of experience gains and losses is recognized only to the extent that the cumulative unamortized net actuarial gain or loss exceeds 10% of the greater of the accrued benefit obligation and the fair market value of plan assets at the beginning of the year. When required, the excess of the cumulative gain or loss balance is amortized over the expected average remaining service life of the employees covered by the plan.

Pension and long-term disability expenses pertaining to the former Winnipeg Hydro employees are recognized at the time contributions are made to the WCEBP, which maintains the funds and obligations relating to these employees in its financial records.

Other employee benefits earned by employees include vacation, vested sick leave, severance and a retirement health spending plan. Where applicable, the future costs of these benefits are based on management's best estimates.

## i) Comprehensive Income

Comprehensive income consists of net income and other comprehensive income (OCI). OCI includes unrealized gains and losses arising from changes in the fair value of available-for-sale assets and changes in the foreign exchange rate for U.S. denominated long-term debt and interest payments in effective cash flow hedging relationships. Such amounts are recorded in accumulated OCI (AOCI) until the criteria for recognition in net income are met.

## j) Financial Instruments

All financial instruments are measured at fair value on initial recognition as of the trade date. Transaction costs are included in the initial carrying amount of financial instruments. Measurement in subsequent periods depends on the classification of the instrument. Financial instruments are classified into one of the following five categories: held-to-maturity investments, loans and receivables, held-for-trading, available-for-sale or other financial liabilities.

Financial instruments classified as loans and receivables and other financial liabilities are measured at amortized cost using the effective interest method of amortization. Available-for-sale financial assets are measured at fair value with revaluation gains and losses recorded in OCI until the instrument is derecognized or impaired. Translation gains and losses on available-for-sale financial assets in a hedging relationship with financial liabilities are credited or charged to finance expense. Held-for-trading financial instruments are measured at fair value and all gains and losses are included in income in the period in which they arise.

## k) Foreign Currency Translation

Revenues and expenditures resulting from transactions in foreign currencies are translated into Canadian dollar equivalents at exchange rates in effect at the transaction dates.

Long-term monetary assets and liabilities denominated in U.S. currencies are translated into Canadian currency at the exchange rate prevailing at the balance sheet date. Translation gains and losses are credited or charged to finance expense in the current period except for long-term debt obligations in hedging relationships with future export revenues. Translation gains and losses for long-term debt obligations in hedging relationships with future export revenues are recorded in OCI until such time that the hedged export revenues are realized, at which time accumulated exchange gains and losses are credited or charged to finance expense.

Current monetary assets and liabilities denominated in foreign currencies are translated into Canadian currency at the exchange rate prevailing at the balance sheet date. Any exchange gains and losses on the translation of current monetary assets and liabilities are credited or charged to finance expense in the current period.

#### Derivatives

The Corporation does not engage in derivative trading or speculative activities. All derivative instruments are carried at fair value on the consolidated balance sheet with the exception of those that were entered into for the purpose of physical receipt or delivery in accordance with the Corporation's expected normal purchases and sales. Changes in the fair value of derivatives that are not designated in a hedging relationship and do not qualify for the normal purchase and sale exemption are recorded in net income.

#### m) Hedges

The Corporation has designated cash flow and fair value hedges linking financial instruments to specific assets and fore-casted transactions. Long-term cash flow hedges have been established between U.S. long-term debt balances and future U.S. export revenues as well as between U.S. interest payments on dual currency bonds and future U.S. export revenues. A fair value hedge relationship has also been established between U.S. long-term debt balances and U.S. sinking fund investments. The Corporation documents the relationship between the hedging instrument and the hedged item and assesses at inception, and on an ongoing basis, the effectiveness of the hedging relationship.

## n) Debt Discounts and Premiums

Debt discounts and premiums are amortized to finance expense using the effective interest method.

## o) Cash and Cash Equivalents

Cash and cash equivalents include cash on hand and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

## p) Goodwill and Intangible Assets

Goodwill represents the amount of the Corporation's investments in Centra Gas and Winnipeg Hydro over and above the fair market value of the identified net assets acquired. The goodwill balance is evaluated annually to determine whether any impairment has occurred. An impairment would be recognized if it was determined that the carrying value of the Corporation's investments in Centra Gas or Winnipeg Hydro exceeded the present value of the future cash flows from these investments. Should impairment occur, it would be recorded as a charge against operations in the year of impairment.

Intangible assets include computer software, application development costs and land easements. Intangible assets are recorded at cost. The cost of computer software and application development costs includes software, direct labour, materials, contracted services, a proportionate share of overhead costs and interest during development applied at the average cost of debt. Intangible assets with finite useful lives are amortized over their useful lives on a straight-line basis. The expected useful lives are as follows:

Computer software and application development 5-15 years Land easements 75 years.

## q) Use of Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect amounts reported in the financial statements. Actual amounts could differ from those estimates, but differences are not expected to be material.

#### NOTE 2 ACCOUNTING CHANGES

## **Overhead Rate Estimate**

Manitoba Hydro's policy is to include a proportionate share of overhead costs in property, plant and equipment based on overhead rate studies that are performed annually. In 2010, the Corporation revised its overhead rate estimate to remove interest capitalized on facilities, equipment and motor vehicles as well as to remove general and administrative departmental costs. This change in estimate was applied prospectively effective April 1, 2010 and resulted in a \$21 million increase in operating and administrative expense in 2010-11.

## **Future Accounting Changes**

## International Financial Reporting Standards (IFRS)

In February 2008, the Canadian Accounting Standards Board (AcSB) announced that publicly accountable enterprises will be required to adopt IFRS in place of Canadian GAAP for fiscal years beginning on or after January 1, 2011. In October 2009, the Public Sector Accounting Board confirmed that government business enterprises such as Manitoba Hydro will be required to follow IFRS for periods beginning January 1, 2011.

Although IFRS and Canadian GAAP are premised on a similar conceptual framework, there are a number of differences with respect to recognition, measurement, and disclosure. The areas with the highest potential to impact Manitoba Hydro include property, plant and equipment, regulatory assets and liabilities, employee benefits, and the transitional requirements upon the adoption of IFRS under the provisions of IFRS 1, First-Time Adoption of IFRS.

In May 2010, the International Accounting Standards Board (IASB) issued the omnibus Improvements to IFRS, which includes an amendment to IFRS 1 for entities with rate-regulated activities. The amendment applies to first-time adopters by offering an optional exemption to use the carrying amount of property, plant and equipment and intangible assets as deemed cost of those assets on the transition date. This exemption eliminates the requirement to retrospectively adjust opening property, plant and equipment and/or intangible asset balances for costs that would otherwise not qualify for capitalization under IFRS. Manitoba Hydro intends to apply this exemption.

In September 2010, the AcSB implemented changes to Part I of the Canadian Institute of Chartered Accountants (CICA) Handbook – Accounting, allowing qualifying entities with rate regulated activities to be permitted, but not required, to defer their adoption of Part I IFRS for one year. Manitoba Hydro meets the AcSB criteria for the deferral and intends to adopt Part I IFRS for its 2012-13 fiscal year.

At this time, it is uncertain as to what position, if any, the IASB might take to address accounting for the effects of rate-regulated activities. In addition, the IASB has a number of on-going projects on its agenda which may result in changes to existing IFRS prior to the commencement of Manitoba Hydro's 2012-13 fiscal period. Manitoba Hydro continues to monitor and evaluate the impacts of current and prospective IFRS on its accounting policies, financial position and business activities.

## Business Combinations, Consolidated Financial Statements and Non-Controlling Interests

In January 2009, the CICA issued Section 1582, Business Combinations, Section 1601, Consolidated Financial Statements and Section 1602, Non-Controlling Interests. Sections 1601 and 1602 superseded Section 1600, Consolidated Financial Statements. Section 1582 was amended to require additional use of fair value measurements, recognition of additional assets and liabilities, and increased disclosure for future business combinations. Sections 1601 and 1602 will require non-controlling interests to be presented as part of equity on the consolidated balance sheet and will also require the consolidated statement of income of the controlling parent to include 100% of the subsidiary's results and present the allocation of income between the controlling and non-controlling interests. These sections will apply to fiscal years beginning on or after January 1, 2011. Changes resulting from the adoption of Section 1582 will be applied prospectively and changes resulting from the adoption of Sections 1601 and 1602 will be applied retrospectively. The impact of these new standards on Manitoba Hydro's consolidated financial statements is currently being assessed but is not expected to be significant.

### NOTE 3 EXTRAPROVINCIAL REVENUES

	2011		2010
	millions of do		
United States	335		361
Canada	63		66
	398		427

U.S. extraprovincial revenues were translated at exchange rates in effect at the date of the transaction. The average effective exchange rate for the year was \$1.00 U.S. = \$1.03 Canadian (2010 - \$1.00 U.S. = \$1.09 Canadian).

## NOTE 4 FINANCE EXPENSE

	2011	2010
		millions of dollars
Interest on debt	573	569
Interest capitalized	(138)	(99)
Amortization of premiums and discounts	3	(11)
Investment income	(18)	(24)
Realized foreign exchange losses on debt in cash flow hedges	1	6
Realized losses (gains) on revaluation of dual currency bonds	4	(31)
	425	410

Included in interest on debt is \$80 million (2010 - \$75 million) related to the Provincial Debt Guarantee Fee. The fee during the year was 1.0% of the total outstanding debt guaranteed by the Province of Manitoba (2010 - 1.0%).

## NOTE 5 WATER RENTALS AND ASSESSMENTS

	2011	:	2010
		millions of dollars	
Water rentals	114		114
Assessments	6		7
	120		121

Water rentals are paid to the Province of Manitoba for the use of water resources in the operation of the Corporation's hydroelectric generating stations. Water rental rates during the year were \$3.34 per MWh (2010 - \$3.34 per MWh).

NOTE 6 PROPERTY, PLANT AND EQUIPMENT

		2011			2010		
	In service	Accumulated depreciation	Construction in progress	In service	Accumulated depreciation	Construction in progress	
			millions	of dollars			
Generation							
Hydraulic	4 855	1 601	2 013	4 722	1 551	1 531	
Thermal	475	239	7	510	259	6	
Transmission lines	793	285	260	782	274	203	
Substations	2 559	1 193	357	2 387	1 094	220	
Distribution	3 144	1 156	52	2 998	1 079	50	
Other	1 141	278	50	1 289	355	42	
	12 967	4 752	2 739	12 688	4 612	2 052	

## NOTE 7 MATERIALS AND SUPPLIES

	2011		2010
		millions of dollars	
Materials and supplies	64		65
Natural gas inventory	21		33
	85		98

## NOTE 8 SINKING FUND INVESTMENTS

Manitoba Hydro is legislated under the Manitoba Hydro Act to make annual sinking fund payments to the Province of Manitoba of not less than 1% of the principal amount of the outstanding debt on the preceding March 31, and 4% of the balance in the sinking fund at such date. Payments to the sinking fund during the year were \$119 million (2010 - \$537 million, including a temporary deposit of \$438 million). Income earned on sinking fund investments is included with investment income for the year.

Sinking funds are invested in government bonds and the bonds of highly rated corporations and financial institutions.

	2011	2010
		millions of dollars
Canadian investments	55	192
U.S. investments	198	597
Premium on purchase of sinking fund investments	29	33
	282	822

Canadian investments have a weighted average term to maturity of 1 day (2010 - 1 day) and an effective yield to maturity of 1.0% (2010 - 0.3%). U.S. investments have a weighted average term to maturity of 7.0 years (2010 - 3.5 years) and an effective yield to maturity of 5.1% (2010 - 4.9%). U.S. investments are translated into Canadian currency at the exchange rate prevailing at the balance sheet date, \$1.00 U.S. = \$0.97 Canadian (2010 - \$1.00 U.S.) = \$1.02 Canadian. The March 31, 2011 balance includes \$14 million (2010 - \$12 million) of unrealized fair value gains.

## NOTE 9 GOODWILL AND INTANGIBLE ASSETS

		2011	1 2010			
		Accumulated			Accumulated	
	Cost	amortization	Net	Cost	amortization	Net
		millions of dollars				
Intangible Assets						
Computer software and development	206	101	105	183	83	100
Easements	59	12	47	57	12	45
	265	113	152	240	95	145
Goodwill	108	-	108	108	-	108
	373	113	260	348	95	253

The additions to intangible assets for the year totaled \$23 million (2010 - \$16 million). In total, intangible assets of \$17 million (2010 - \$16 million) were amortized to operations during the period.

## NOTE 10 REGULATED ASSETS

	2011	2010
	mi	llions of dollars
Power Smart programs - electric	172	168
- gas	39	32
Site restoration costs	38	37
Deferred taxes	33	35
Acquisition costs	22	23
Regulatory costs	5	4
	309	299

If the Corporation were not subject to rate regulation, the costs associated with the regulated assets would be charged to operations in the period that they were incurred and net income for 2011 would have been reduced by \$10 million (2010 - \$12 million).

In total, regulated assets of \$39 million (2010 - \$36 million) were amortized to operations during the period.

## NOTE 11 OTHER DEFERRED ASSETS

	2011	2010
	mi	llions of dollars
Advances to St. Joseph Windfarm Inc. (excluding current portion)	199	-
Accrued benefit asset (Note 18)	129	120
Advances to Taskinigahp Power Corporation (Note 22)	84	59
Contract receivables	76	82
Affordable Energy Fund (Note 21)	27	31
	515	292

The St. Joseph wind farm is owned by Pattern Energy and operated by St. Joseph Windfarm Inc. Financing for the wind farm was provided partly by Manitoba Hydro. In accordance with the loan agreement, Manitoba Hydro will provide advances up to \$250 million which will be repaid, with interest, over 20 years. In addition, Manitoba Hydro will provide access to a \$10 million reserve loan facility. The Corporation signed a 27-year power purchase agreement with St. Joseph Windfarm Inc. in March 2010.

## NOTE 12 LONG-TERM DEBT

	2011	2010
	millions of dollars	S
Advances from the Province of Manitoba		
represented by debenture debt of the Province	8 467	8 288
Manitoba HydroBonds	44	132
Manitoba Hydro-Electric Board Bonds	197	199
	8 708	8 619
Less: Current portion of long-term debt	30	310
	8 678	8 309
Adjustment on carrying value of dual currency bonds	(28)	(29)
Debt discounts and premiums	(6)	(27)
Transaction costs	(27)	(25)
	8 617	8 228

During the year, the Corporation arranged long-term financing of \$915 million (2010 - \$1 425 million). The current year financing was in the form of Provincial Advances with the majority at fixed interest rates.

Included in the current portion of long-term debt are \$16 million (2010 - \$292 million) of debt maturities and \$14 million (2010 - \$18 million) of floating-rate Manitoba HydroBonds with maturity dates in 2012 and 2013. Floating rate Manitoba HydroBonds are redeemable at the option of the holder.

Long-term debt is guaranteed by the Province of Manitoba, with the exception of Manitoba Hydro-Electric Board Bonds in the amount of \$75 million (2010 - \$76 million) issued for mitigation projects.

Debt principal amounts (excluding adjustments to the carrying value of dual currency bonds, transaction costs, debt discounts and premiums) and related yields are summarized by fiscal years of maturity in the following table:

					2011	2010	
millions of Canadian dollars							
Years of Maturity	Canadian	Cdn Yields	U.S.	U.S. Yields	Total	Total	
2012	30	2.5%			30	16	
2013	177	3.2%			177	178	
2014	475	4.3%	329	5.6%	804	1 072	
2015	100	3.3%			100	100	
2016	314	4.9%			314	264	
	1 096	4.4%	329	5.6%	1 425	1 630	
2017-2021	1 769	5.6%	778	7.8%	2 547	2 407	
2022-2026	453	6.4%	777	6.1%	1 230	1 116	
2027-2031	1 010	8.8%			1 010	910	
2032-2036	314	5.4%			314	314	
2037-2041	1 700	4.9%			1 700	1 450	
2042-2063	482	4.7%			482	482	
	6 824	5.7%	1 884	6.7%	8 708	8 309	

Included in the above Canadian maturity amounts are two dual currency bonds with principal amounts repayable in Canadian currency and interest payments denominated in U.S. currency. The first dual currency bond matures in the 2013-14 fiscal year in the amount of \$208 million Canadian while the second matures in the 2025-26 fiscal year in the amount of \$130 million Canadian.

U.S. debt is translated into Canadian currency at the exchange rate prevailing at the balance sheet date, \$1.00 U.S. = \$0.97 Canadian (2010 - \$1.00 U.S. = \$1.02 Canadian).

NOTE 13 ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	2011	2010
	mil	lions of dollars
Accounts payable and accrued liabilities	323	324
Regulated liabilities		
Purchased gas variance accounts	13	3
	336	327

The Corporation passes all costs related to the purchase and transportation of natural gas onto its customers without markup. If the Corporation were not subject to rate regulation, the purchased gas variance accounts would not be maintained and the actual cost of gas would be expensed in the period incurred. If actual gas costs were expensed and sales rates were not adjusted accordingly, net income would have increased by \$10 million (2010 - decreased by \$8 million).

## NOTE 14 ASSET PURCHASE OBLIGATION

Effective September 3, 2002, the Corporation acquired the net assets of Winnipeg Hydro from the City of Winnipeg. The Asset Purchase Obligation represents the net present value of payments to the City of Winnipeg of \$16 million per annum in perpetuity, excluding the current portion of \$16 million (2010 – \$20 million).

## NOTE 15 OTHER DEFERRED LIABILITIES

	2011	2010
	mi	llions of dollars
Accrued benefit liability (Note 18)	154	141
Mitigation liability (Note 20)	185	129
Non-controlling interest (Note 22)	87	62
Refundable advances from customers	72	63
Affordable Energy Fund (Note 21)	27	31
Asset retirement obligations	15	23
Interest income and other liabilities	6	6
	546	455

In 2010-11, the Corporation adjusted its obligation associated with thermal decommissioning to reflect changing legislation and licensing requirements. The change in estimate was applied prospectively and resulted in a reduction of \$9 million to the asset retirement obligation and a corresponding reduction of \$8 million to depreciation expense and a \$1 million decrease to property, plant and equipment.

Asset retirement obligations continue to be recognized for the future decommissioning of the Brandon thermal generating station, for the partial decommissioning of the Pointe du Bois generating station spillway, and for the removal and disposal of polychlorinated biphenyl (PCB) contaminated fluid in HVDC converter station capacitors. The Corporation estimates the undiscounted cash flows required to settle the asset retirement obligations are approximately \$31 million, \$27 million of which is expected to be incurred in 2024 to decommission the Brandon thermal generating station, \$4 million is expected to be incurred by March 2016 for the partial decommissioning of the Pointe du Bois generating station spillway and a residual amount will be incurred by March 31, 2012 for PCB contaminated oil removal and disposal. No funds are being set aside to settle the asset retirement obligations.

## **NOTE 16 FINANCIAL INSTRUMENTS**

The carrying amounts and fair values of the Corporation's non-derivative financial instruments at March 31 were as follows:

	201	1	201	0
Financial Instruments	Carrying Value	Fair Value	Carrying Value	Fair Value
		millions o	of dollars	
Held-for-Trading				
Cash and cash equivalents	70	70	174	174
Loans and Receivables				
Accounts receivable and accrued revenue	403	403	365	365
Interest receivable	4	4	6	6
Available-for-Sale				
Sinking fund investments	282	282	822	822
Other Financial Liabilities				
Long-term debt (including current portion)	8 647	10 045	8 538	9 754
Accounts payable and accrued liabilities	336	336	327	327
Accrued interest	95	95	91	91
Asset purchase obligation	207	280	207	269

The fair value measurement of financial instruments is classified in accordance with a hierarchy of three levels, based on the type of inputs used in making these measurements:

- Level 1 Quoted prices in active markets for identical assets and liabilities;
- Level 2 Inputs other than quoted prices that are observable in active markets for the asset or liability; and
- Level 3 Inputs for the asset or liability that are not based on observable market data.

Financial instrument measurements are level 1 measurements with the exception of the long-term debt and the asset purchase obligation that are level 2 measurements, and certain derivative instruments of nominal value associated with wholesale power marketing activities that are level 3 measurements. Fair value level 2 measurements are derived from quoted market yields at the close of business on the consolidated balance sheet date for similar instruments available in the capital market. Level 3 measurements are based on internally developed valuation models which are consistent with valuation models developed by other market participants in the wholesale power markets. The carrying values of all other financial assets and liabilities approximate fair value.

### **Financial Risks**

During the normal course of business, Manitoba Hydro is exposed to a number of financial risks including credit and liquidity risks and market risk resulting from fluctuations in foreign currency, interest rates and commodity prices. Risk management policies, processes and systems have been established to identify and analyze financial risks faced by the Corporation and its subsidiaries, to set risk tolerance limits, establish controls and to monitor risk and adherence to policies. An integrated risk management plan has been developed, and reviewed by the Audit Committee of the Manitoba Hydro-Electric Board, to ensure the adequacy of the risk management framework in relation to the risks faced by the Corporation. The nature of the financial risks and Manitoba Hydro's strategy for managing these risks has not changed significantly from the prior year.

#### a) Credit Risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss to the other party by failing to discharge an obligation. Manitoba Hydro is exposed to credit risk related to sinking fund investments, short-term investments and pension fund investments. The Corporation limits its exposure to credit risk by only investing in government-guaranteed bonds, highly rated investments and well-diversified investment portfolios.

The Corporation is also exposed to credit risk related to accounts receivable arising from domestic and export energy sales. Credit risk related to domestic sales is mitigated by the large and diversified electric and gas customer base. Credit risk in the export power market is mitigated by establishing minimum credit rating requirements, conducting standard credit reviews of all counterparties and setting and monitoring exposure limits for each of these counterparties. Letters of credit and netting provisions are also in place to provide further credit risk control. The maximum exposure to credit risk related to non-derivative financial assets is its carrying value.

The value of the Corporation's aged accounts receivable for domestic and export customers and related bad debt provisions are presented in the following table:

			2011	2010
	Domestic	Extraprovincial	Total	Total
		millions	of dollars	
Under 30 days	244	28	272	244
30 to 60 days	17	-	17	19
61 to 90 days	8	-	8	10
Over 90 days	28	-	28	31
	297	28	325	304
Provision at end of period	(8)	-	(8)	(8)
Total accounts receivable	289	28	317	296

The provision for bad and doubtful accounts is reviewed annually, based on an estimate of aged domestic and export receivables that are considered uncollectible. The provision of \$8 million for bad and doubtful accounts did not change from the previous year.

To mitigate credit risk related to the use of natural gas derivative instruments, the Corporation adheres to well established credit exposure limits with institutions that possess a minimum credit rating of 'A' from recognized bond rating agencies or provide a parental guarantee from an 'A' rated parent company. The Corporation's maximum exposure to credit risk related to its derivative counterparties is equal to the positive fair value of its financial derivatives.

## b) Liquidity Risk

Liquidity risk refers to the risk that Manitoba Hydro will not be able to meet its financial obligations as they come due. To meet the Corporation's forecasted cash requirements, the Corporation uses cash generated from operations, a short-term borrowing program, long-term borrowings advanced from the Province of Manitoba and sinking funds for debt retirements.

The following is an analysis of the contractual undiscounted cash flows payable under financial liabilities and derivative liabilities as at the consolidated balance sheet date:

	Carrying Value	2012	2013	2014	2015	2016	2017 and thereafter
			milli	ons of dollars	S		
Non-derivative financial liabilities							
Accounts payable and accrued liabilities	336	336	-	-	-	-	-
Asset purchase obligation	207	16	16	16	16	16	16*
Long-term debt**	8 742	611	770	1 388	655	868	13 559
		963	786	1 404	671	884	13 575
Derivative financial liabilities							
Commodity derivatives							
Natural gas collar obligations	-	1	-	-	-	-	-
	-	1	-	-	-	-	-
		964	786	1 404	671	884	13 575

<sup>\*</sup>per year in perpetuity

<sup>\*\*</sup>including current portion and interest payments

### c) Market Risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Manitoba Hydro is exposed to three types of market risk: foreign exchange risk, interest rate risk and commodity price risk associated with the price of electricity and natural gas. Manitoba Hydro continually monitors its exposure to these risks and may use hedges or derivative contracts to manage these risks.

## i. Foreign Exchange Risk

Manitoba Hydro has exposure to U.S. dollar foreign exchange rate fluctuations primarily through the sale and purchase of electricity in the U.S. This exposure is managed through a long-term natural hedge between U.S. dollar cash inflows from export revenues and U.S. dollar cash outflows for long-term coupon and principal payments.

To mitigate annual net income impacts due to foreign exchange rate fluctuations, long-term cash flow hedges have been established between U.S. long-term debt balances and future U.S. export revenues as well as between U.S. interest payments on dual currency bonds and future U.S. export revenues. Accordingly, translation gains and losses for U.S. long-term debt obligations in effective hedging relationships with future export revenues, are recognized in other comprehensive income until future hedged U.S. export revenues are realized, at which time the associated gains or losses in accumulated other comprehensive income are recognized in net income. For the year ended March 31, 2011, unrealized foreign exchange translation gains of \$79 million (2010 - \$455 million) were recognized in other comprehensive income and net losses of \$1 million (2010 - \$6 million) were reclassified from other comprehensive income into net income.

Manitoba Hydro also has a fair value hedging relationship between U.S. long-term debt balances and U.S. sinking fund investments. Offsetting foreign exchange translation gains and losses on these items are recognized in net income.

In addition to natural hedging relationships, cross currency swap arrangements transacted by the Province of Manitoba on the Corporation's behalf are utilized to manage exchange rate exposures and as a means to capitalize on favourable financing terms in either U.S. or Canadian capital markets. Cross currency agreements represent an exchange of principal and/or interest flows denominated in one currency for principal and/or interest flows denominated in another. Such transactions effectively amend the terms of the original debt obligation with the Province of Manitoba with the swapped debt arrangement.

As of March 31, 2011, a change in the Canadian dollar of plus (minus) \$0.10 relative to the U.S. dollar would decrease (increase) net income by \$0.2 million (2010 - \$0.5 million), while other comprehensive income would increase (decrease) by \$174 million (2010 - \$180 million).

## ii. Interest Rate Risk

Interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate due to changes in market interest rates. Manitoba Hydro is exposed to interest rate risk associated with temporary investments and floating rate long-term debt. At March 31, 2011, an increase or decrease of 1% in the interest rate would reduce or increase net income, respectively, by \$9 million (2010 - \$11 million), with no impact to other comprehensive income.

Interest rate swap agreements transacted by the Province of Manitoba on the Corporation's behalf are utilized to manage the fixed and floating interest rate mix of the total debt portfolio, interest rate exposure and related overall cost of borrowing. Interest rate swap agreements represent an agreement between two parties to periodically exchange payments of interest without the exchange of the principal amount upon which payments are based. The Province of Manitoba may also enter into forward start interest rate swap arrangements where the agreement to exchange interest payments commences at some future date. In either swap arrangement, the terms of the debt advanced by the Province of Manitoba to the Corporation are amended by the swap.

## iii. Commodity Price Risk

The Corporation is exposed to natural gas price risk through its purchase of gas for delivery to customers throughout Manitoba. The Corporation mitigates natural gas price volatility through its use of derivative instruments restricted to price swaps, call options and cashless collars. To manage the exposure to electricity price risk that results from the volatility of market prices, the Corporation also enters into derivative financial instruments such as contracts for differences. Manitoba Hydro does not use derivative contracts for trading or speculative purposes.

The Corporation has entered into cashless collar contracts until July 2011 to purchase 2 355 000 gigajoules (GJ) of natural gas at a weighted average upper strike price of \$5.26/GJ and a weighted average lower strike price of \$4.11/GJ. The weighted average forward price of the cashless collars per the Alberta Energy Company Exchange (AECO) at March 31, 2011 is \$3.53/GJ. Settlement values are recorded in the purchased gas variance account in the month the natural gas is delivered.

The Corporation has also entered into natural gas price swaps until April 2016 to purchase 595 200 gigajoules of natural gas at a weighted average fixed price of \$5.20/GJ. The weighted average forward price of the swaps per AECO at March 31, 2011 was \$4.40/GJ. These contracts are reported as derivatives and carried at fair value on the balance sheet.

A contract for differences was entered into until May 2011 to fix the price of electricity exports for 50 400 megawatt hours. The cash difference between the fixed price that the Corporation receives and the floating price paid will be cash settled. In addition, derivative instruments associated with wholesale power marketing activities have been transacted. These contracts are reported as derivatives and carried at fair value on the balance sheet.

The unrealized fair value gains (losses) of financial derivative contracts as at March 31 are as follows:

	2011	2010
	mili	lions of dollars
Cashless collar contracts	(1)	(18)
Fixed price swap contracts	-	(1)
Contracts for differences	1	1

Fair values of price swaps and cashless collars are calculated using the monthly forward AECO price as reported by the Natural Gas Exchange as at March 31, 2011.

Fair values of contracts for differences are calculated using the monthly forward electricity prices at pricing points specified in the contracts.

A change in fair value of cashless collars due to a 10% increase or decrease in the price of natural gas would decrease or increase the purchased gas variance account by \$1 million (2010 - \$7 million).

## NOTE 17 CAPITAL MANAGEMENT

Manitoba Hydro manages its capital structure to ensure sufficient equity to enable the Corporation to absorb the financial effects of adverse circumstances and to ensure continued access to stable low-cost funding for the Corporation's capital projects and its ongoing operational requirements.

The Corporation monitors its capital structure on the basis of its equity ratio. Manitoba Hydro's current target is to maintain a minimum equity ratio of 25%.

The Corporation's equity ratio as at March 31 was as follows:

	2011	2010
	dollar	rs are in millions
Long-term debt, net of sinking fund investments	8 335	7 406
Current portion, long-term debt	30	310
Less: Cash and cash equivalents	(70)	(174)
Net debt	8 295	7 542
Retained earnings	2 389	2 239
Accumulated other comprehensive income	367	285
Contributions in aid of construction	295	295
Total equity	3 051	2 819
Equity ratio	27%	27%

Manitoba Hydro issues debt for its capital requirements under the authority of the Manitoba Hydro Act and the Loan Act. The Manitoba Hydro Act grants the Corporation the power to issue up to \$500 million of short-term promissory notes. Manitoba Hydro submits annual requests under the Loan Act for the necessary borrowing authority for new capital requirements and the refinancing of any maturing long-term debt. The majority of Manitoba Hydro's long-term debt is obtained through advances by the Province of Manitoba.

#### NOTE 18 EMPLOYEE FUTURE BENEFITS

Manitoba Hydro employees are eligible for pension benefits under the Civil Service Superannuation Board (CSSB) defined benefit plan that provides pension benefits based on years of service and on the average earnings of the five best years. The CSSB plan requires the Corporation to contribute approximately 50% of the pension disbursements made to retired employees. In addition, the former employees of Centra Gas are entitled to pension benefits earned under the Centra Gas curtailed pension plans. The former Winnipeg Hydro employees continue to earn benefits under the Winnipeg Civic Employee Benefits Program (WCEBP) in which, upon the acquisition of Winnipeg Hydro, Manitoba Hydro became a participating employer. The WCEBP is also a defined benefit plan that provides pension benefits based on years of service and on the average earnings of the five best years.

The CSSB manages the Corporation's pension fund (MH Pension Fund) on behalf of the Corporation. The assets related to the Centra Gas curtailed pension plans are held in trust by State Street Trust Co. of Canada. The assets and liabilities of the WCEBP are not reflected on Manitoba Hydro's consolidated balance sheet.

The following table presents information concerning the MH Pension Fund and the Centra Gas curtailed pension plans:

	MH Pension Fund			Centra Gas curtailed pension plans		tal
	2011	2010	2011	2010	2011	2010
			millions	of dollars		
Plan Assets at Fair Value						
Balance at beginning of year	694	623	73	57	767	680
Actual return on plan assets	81	117	10	12	91	129
Employer contributions	24	-	6	9	30	9
Benefit payments and refunds	(36)	(46)	(5)	(5)	(41)	(51)
	763	694	84	73	847	767
Accrued Benefit Obligation						
Balance at beginning of year	774	730	82	81	856	811
Interest on obligation	50	47	5	5	55	52
Current service cost	25	23	-	-	25	23
Benefit payments and refunds	(36)	(35)	(4)	(4)	(40)	(39)
Actuarial losses	24	9	3	-	27	9
	837	774	86	82	923	856
Deficit at end of year	(74)	(80)	(2)	(9)	(76)	(89)
Unamortized past service costs	-	-	2	2	2	2
Unamortized transitional balance	(3)	(4)	(1)	(1)	(4)	(5)
Unamortized net actuarial loss	177	180	30	32	207	212
Accrued benefit asset	100	96	29	24	129	120

Pension assets are valued at market rates and are invested as follows:

		Pension Fund Fair Value			ra Gas curtailed ension plans Fair Value
	2011	2010		2011	2010
			millions of de	ollars	
Equities	508	421		56	46
Bonds and debentures	178	170		21	19
Real estate	71	77		4	4
Short-term investments	6	26		3	4
	763	694		84	73

The return on pension fund assets for the MH Pension Fund was 12.1% (2010 - 19.3%). The return for the Centra Gas curtailed plan fund assets was 12.1% (2010 - 21.7%). The weighted average term to maturity on fixed income investments is 9.1 years (2010 - 8.6 years).

The most recent actuarial valuations for the Corporation's obligations under the CSSB and Centra Gas curtailed pension plans were performed with respect to the liabilities outstanding as at December 31, 2010. These valuations incorporated management's best estimate assumptions and took into consideration the long-term nature of the pension plans. The next actuarial valuations for all plans will occur in December 2011. The Centra Gas curtailed pension plans are also subject to a solvency valuation for funding purposes with the latest valuation taking place as at December 31, 2010.

The significant actuarial assumptions adopted in measuring the Corporation's pension and other employee benefit obligations are as follows:

	2011	2010
Discount rate	6.5%	6.5%
Expected long-term rate of return on plan assets	7.0%	7.0%
Rate of compensation increase, including merit and promotions	1.5 - 2.0%	1.5 - 2.0%
Expected average remaining service life of employees - MH Pensions	14 years	14 years
Expected average remaining service life of employees - Centra Pensions	10 years	10 years
Long-term inflation rate	2.5%	2.5%

The Corporation's pension expense related to each of the pension benefit plans is as follows:

		CSSB Plan	curta	Centra Gas curtailed pension plans		
	2011	2010	2011	2010		
		mil	llions of dollars			
Current service cost	25	23	-	-		
Administrative fees	2	2	-	-		
Canada Pension Plan	14	13	-	-		
Interest on obligation	50	47	5	5		
Expected return on plan assets	(56)	(55)	(6)	(6)		
Amortization of net experience loss	1	-	1	1		
Amortization of transitional gain	(1)	(1) (1) -				
	35	29	-	-		

Pension expense for the former Winnipeg Hydro employees is equal to employer contributions to the WCEBP in addition to employer remittances to the Canada Pension Plan. Total contributions to the WCEBP during the year amounted to \$0.9 million (2010 - \$0.5 million) and reflect an employer contribution rate approximating 3.5% of pensionable earnings to January 5, 2011 and 3.9% of pensionable earnings thereafter.

The following table presents information concerning other employee future benefits:

	2011	2010
	millio	ons of dollars
Accrued benefit liability		
Balance at beginning of year	157	149
Interest on obligation	3	3
Current service cost	23	20
Benefit payments	(14)	(15)
Actuarial gains	(3)	-
	166	157
Unamortized past service costs	(10)	(11)
Unamortized transitional obligation	(4)	(5)
Unamortized net actuarial gain	2	-
Accrued benefit liability	154	141

### NOTE 19 COMMITMENTS AND CONTINGENCIES

Manitoba Hydro has energy purchase commitments of \$1 562 million (2010 - \$1 565 million) that relate to future purchases of wind, natural gas (including transportation and storage contracts), coal and electricity. Commitments are primarily for wind, which expire in 2038, and natural gas purchases, which expire in 2013. In addition, other outstanding commitments principally for construction, are approximately \$673 million (2010 - \$818 million).

The Corporation will incur future costs associated with the assessment and remediation of contaminated lands and facilities and for the phase-out and destruction of PCB contaminated mineral oil from electrical equipment. Although these costs cannot be reasonably determined at this time (except for items already recognized as Asset Retirement Obligations), a contingent liability exists.

Due to the size, complexity and nature of Manitoba Hydro's operations, various legal and operational matters are pending. It is not possible at this time to predict with any certainty the outcome of these matters. Management believes that any settlements related to these matters will not have a material effect on Manitoba Hydro's consolidated financial position or results of operations.

Manitoba Hydro provides guarantees to counterparties as part of its use of natural gas derivative commodity contracts. Guarantees issued at March 31, 2011 totaled \$305 million (2010 - \$305 million) and do not have specific maturity dates. Letters of credit in the amount of \$4 million (2010 - \$4 million) have been issued for energy related transactions with maturities until 2012.

#### NOTE 20 MITIGATION

The Corporation is party to an agreement dated December 16, 1977 with Canada, the Province of Manitoba and the Northern Flood Committee Inc., representing the five First Nations in the communities of Cross Lake, Nelson House, Norway House, Split Lake and York Landing. This agreement, in part, provides for compensation and remedial measures necessary to ameliorate the impacts of the Churchill River Diversion and Lake Winnipeg Regulation projects. Comprehensive settlements have been reached with all communities except Cross Lake.

Expenditures incurred or settlements reached to mitigate the impacts of all projects amounted to \$87 million during the period (2010 - \$26 million). In recognition of future anticipated mitigation payments, the Corporation has recorded a liability of \$185 million (2010 - \$129 million). As at March 31, 2011, \$788 million (2010 - \$701 million) has been recorded to mitigate and compensate for all project-related impacts. These expenditures are included in the costs of the related projects and amortized over the respective remaining lives. There are other mitigation issues, the outcomes of which are not determinable at this time.

Included in mitigation payments or liabilities are obligations assumed on behalf of the Province of Manitoba with respect to certain northern development projects. The Corporation has assumed obligations totaling \$145 million for which water power rental charges were fixed until March 31, 2001. The obligations outstanding at March 31, 2011 amounted to \$12 million (2010 - \$12 million).

#### NOTE 21 AFFORDABLE ENERGY FUND

In accordance with the provisions of the Winter Heating Cost Control Act, Manitoba Hydro established an Affordable Energy Fund (the Fund) in the initial amount of \$35 million for the purpose of providing support for programs and services that:

- a) encourage energy efficiency and conservation;
- b) encourage the use of alternative energy sources, including earth energy; and
- c) facilitate research and development of alternative energy services and innovative energy technologies.

For accounting purposes, the Fund is classified as Other Deferred Assets (Note 11) with an offsetting balance in Other Deferred Liabilities (Note 15). Expenditures of \$4 million (2010 - \$2 million) during the year were charged to operations with the asset and liability accounts reduced accordingly.

## NOTE 22 ADVANCES TO TASKINIGAHP POWER CORPORATION

Taskinigahp Power Corporation (TPC) has a non-controlling interest in the Wuskwatim Generating Station which is currently under construction and projected to be placed in-service in 2012.

TPC is owned beneficially by Nisichawayasihk Cree Nation (NCN). Both Manitoba Hydro and NCN are parties to the Wuskwatim Power Limited Partnership (WPLP) which was formed to carry on the business of developing, owning and operating the generating station.

In accordance with the partnership agreements, Manitoba Hydro provides debt financing to TPC. At March 31, 2011, Manitoba Hydro has provided advances to TPC of \$78 million (2010 - \$55 million). The advances are repayable by TPC, with interest, subsequent to the in-service date of the Wuskwatim Generating Station. TPC's non-controlling interest is \$87 million (2010 - \$62 million).

### NOTE 23 SEGMENTED INFORMATION

The Corporation operates primarily in two business segments: electricity and natural gas. Each segment has its own particular economic characteristics and differs in nature, production processes and technology. The electricity segment encompasses the generation, transmission and distribution of electricity. The gas segment represents natural gas supply and distribution activities through the operations of Centra Gas. The corporate segment represents the costs to acquire Centra Gas and to integrate its operations into those of Manitoba Hydro. These costs are allocated to gas and electricity segments in accordance with the synergies and benefits derived by each of these segments as a result of the acquisition.

The following table contains information related to the operating results, assets, liabilities, contributions in aid of construction and retained earnings by segment:

	Elect	ricity	Ga	as	Corp	orate	To	tal
	2011	2010	2011	2010	2011	2010	2011	2010
				millions	of dollars			
Revenues (1)	1 615	1 583	143	138	-	-	1 758	1 721
_								
Expenses								
Operating and administrative	401	379	61	61	-	-	462	440
Finance expense	388	373	18	19	19	18	425	410
Depreciation and amortization	366	358	25	24	2	2	393	384
Water rentals and assessments	120	121	-	-	-	-	120	121
Fuel and power purchased	106	104	-	-	-	-	106	104
Capital and other taxes	82	76	20	23	-	-	102	99
Corporate allocation	9	8	12	12	(21)	(20)	-	-
	1 472	1 419	136	139	-	-	1 608	1 558
Net income (loss)	143	164	7	(1)	-	-	150	163
Total assets	12 288	11 856	594	581	-	-	12 882	12 437
Total liabilities	9 310	9 102	521	516		_	9 831	9 618
וטנמו וומטווונוכט	9310	J 102	321	010	_	-	9 00 1	3010
Contributions in aid of construction	262	263	33	32	-	-	295	295
Retained earnings	2 349	2 206	40	33	-	-	2 389	2 239

<sup>(1)</sup> Revenues are stated net of cost of gas sold of \$261 million (2010 - \$316 million) and Manitoba Hydro International project costs of \$23 million (2010 - \$15 million).

## NOTE 24 COMPARATIVE FIGURES

Where appropriate, comparative figures for 2010 have been reclassified in order to conform to the presentation adopted in 2011.

## **Financial Statistics**

For the year ended March 31	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
					millions of a	dollars				
Revenues										
Electrical:										
Residential	503	476	463	436	410	387	386	368	354	314
General Service	697	669	664	638	614	597	553	550	521	472
Extraprovincial	398	427	623	625	592	827	554	351	463	588
Other Revenue	17	11	21	13	11	10	9	11	10	8
Gas:										
Residential	205	222	292	268	258	245	244	235	247	225
Commercial / Industrial	193	225	281	254	244	267	258	252	261	248
Transportation	5	5	5	4	4	3	5	4	4	4
Other Revenue	1	2	2	2	2	2	2	3	3	2
	2 019	2 037	2 351	2 240	2 135	2 338	2 011	1 774	1 863	1 861
-										
Expenses	400	440	400	004	004	000	057	000	000	205
Operating and Administrative	462	440	429	381	381	368	357	339	320	295
Finance Expense	425	410	471	440	506	503	502	487	479	482
Depreciation and Amortization	393	384	368	349	332	322	311	296	281	260
Water Rentals and Assessments	120	121	123	124	112	131	111	71	103	113
Fuel and Power Purchased	106	104	176	134	226	125	135	569	151	71
Capital and Other Taxes	102	99	87	80	77	77	75	73	66	61
Cost of Gas Sold	261	316	431	386	379	397	384	375	392	365
	1 869	1 874	2 085	1 894	2 013	1 923	1 875	2 210	1 792	1 647
Net Income	150	163	266	346	122	415	136	( 436)	71	214
Assets										
Property, Plant and Equipment	12 967	12 688	12 300	11 884	11 424	11 065	10 748	10 399	9 991	9 072
Less Accumulated Depreciation	4 752	4 612	4 356	4 187	3 924	3 657	3 447	3 241	3 042	2 834
Construction in Progress	2 739	2 052	1 438	1 238	878	602	475	378	356	388
Sinking Fund Investments	282	822	666	718	630	555	562	715	948	1 515
Current and Other Assets	1 646	1 487	1 499	2 113	1 914	1 917	1 614	1 652	1 981	2 264
	12 882	12 437	11 547	11 766	10 922	10 482	9 952	9 903	10 234	10 405
								-		
Liabilities and Retained Earnings										
Long-Term Debt	8 617	8 228	7 668	7 218	6 822	7 051	7 048	7 114	6 925	7 123
Current and Other Liabilities	1 214	1 390	1 676	2 121	2 395	1 849	1 738	1 781	1 875	1 699
Contributions in Aid of Construction	295	295	296	300	298	297	296	274	264	281
Retained Earnings	2 389	2 239	2 076	1 822	1 407	1 285	870	734	1 170	1 302
Accumulated Other Comprehensive Income	367	285	(169)	305	-	-	-	-	-	-
	12 882	12 437	11 547	11 766	10 922	10 482	9 952	9 903	10 234	10 405
Cash Flows										
Operating Activities	572	589	688	633	443	710	433	(127)	432	554
	681	1 124	424	487	227	710	236	753		100
Financing Activities Investing Activities	1 357	1 698	1 086	988	788	677	666	650	213 629	638
mycoung Achvinco	1 33/	1 090	1 000	900	100	0//	000	000	029	036
Financial Indicators										
Interest Coverage <sup>1</sup>	1.27	1.32	1.49	1.69	1.23	1.77	1.25	0.17	1.14	1.42
Debt Ratio <sup>2</sup>	0.73	0.73	0.77	0.73	0.80	0.81	0.85	0.87	0.80	0.77

<sup>&</sup>lt;sup>1</sup>Interest Coverage represents net income plus interest on debt divided by interest on debt.

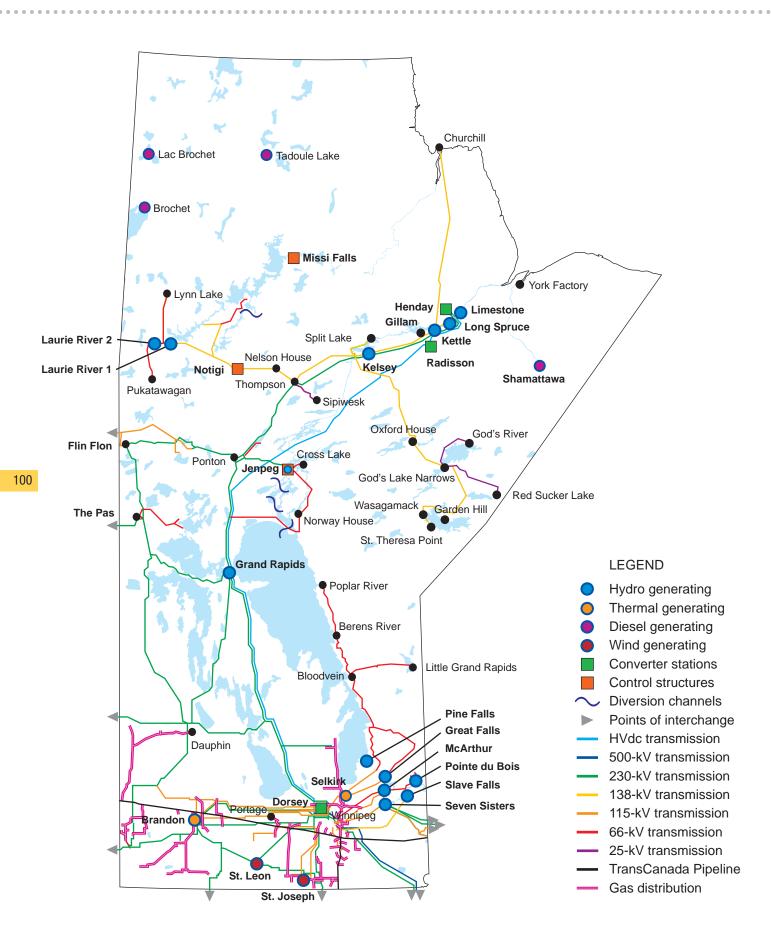
<sup>\*</sup>Debt Ratio represents debt (long-term debt plus notes payable minus sinking fund investments and temporary investments) divided by debt plus equity plus contributions in aid of construction.

<sup>&</sup>lt;sup>3</sup>Capital Coverage represents internally generated funds divided by capital construction expenditures.

# **Operating Statistics**

For the year ended March 31	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Electric System Capability										
Capability (000 kW)	5 489	5 501	5 480	5 465	5 461	5 469	5 470	5 471	5 464	5 230
Manitoba Firm Peak Demand (000 kW)	4 261	4 359	4 477	4 273	4 184	4 054	4 169	3 959	3 916	3 760
Percent Change	(2.2)	(2.6)	4.8	2.1	3.2	(2.8)	5.3	1.1	4.1	3.4
Electric System Supply										
Total Energy Supplied (millions of kWh)										
Generation	34 102	33 961	34 528	35 354	32 132	37 620	31 548	19 338	29 167	32 633
Isolated Systems	13	13	13	12	12	12	11	11	11	10
	34 115	33 974	34 541	35 366	32 144	37 632	31 559	19 349	29 178	32 643
Electric Load at Generation (millions of kWh)										
Integrated System	23 515	23 295	24 285	23 985	23 327	22 622	22 452	21 907	21 965	20 519
Isolated System	13	13	13	12	12	12	11	11	11	10
	23 528	23 308	24 298	23 997	23 339	22 634	22 463	21 918	21 976	20 529
Percent Change	0.9	(4.1)	1.3	2.8	3.1	0.8	2.5	(0.3)	7.0	2.0
Electric System Deliveries (millions of kWh)										
Energy Delivered in Manitoba										
Residential	7 060	6 899	6 954	6 838	6 539	6 266	6 370	6 266	6 135	5 206
General Service	13 727	13 587	14 256	14 223	13 965	13 669	13 365	13 014	12 143	10 25
	20 787	20 486	21 210	21 061	20 504	19 935	19 735	19 280	18 278	15 46
Extraprovincial	31 131	10 860 31 346	10 122 31 332	11 086 32 147	10 100 30 604	13 773 33 708	10 475 30 210	6 966 26 246	9 735	12 298 27 76
Gas Deliveries (millions of cubic metres)  Residential	591	581	696	682	653	600	681	653	714	64!
Commercial / Industrial	821	803	866	856	811	782	917	893	980	899
Transportation	584	619	603	618	592	598	559	577	640	502
панэронацон	1 996	2 003	2 165	2 156	2 056	1 980	2 157	2 123	2 334	2 046
Number of Customers										
Electric:										
Residential	469 635	465 055	460 804	455 430	450 823	446 370	442 840	438 953	435 507	355 473
General Service	67 664	67 304	66 668	66 169	66 038	63 421	62 826	62 697	62 218	50 062
	537 299	532 359	527 472	521 599	516 861	509 791	505 666	501 650	497 725	405 53
Gas:										
Residential	241 123	239 535	239 597	237 724	236 086	234 108	231 366	229 194	227 071	225 258
Commercial / Industrial	24 838	24 766	23 411	23 435	23 483	23 709	24 559	24 437	24 202	24 093
	265 961	264 301	263 008	261 159	259 569	257 817	255 925	253 631	251 273	249 35
Number of Employees										
Regular	4 860	4 777	4 752	4 709	4 406	4 409	4 386	4 389	4 399	3 862
Construction	1 439	1 424	1 266	1 107	1 161	1 154	1 098	1 006	966	899
	6 299	6 201	6 018	5 816	5 567	5 563	5 484	5 395	5 365	4 76

## Major electrical and gas facilities



# Sources of electrical energy

## Sources of Electrical Energy Generated and Purchased

For the	Year	Ended	March	31,	2011
---------	------	-------	-------	-----	------

Nelson River	80.12 %	Saskatchewan River	5.52 %	Thermal	0.19 %
Billion kWh generated	27.8	Billion kWh generated	1.9	Billion kWh generated	0.1
Limestone	27.28 %	Grand Rapids	5.52 %	Brandon	0.14 %
Kettle	25.62 %			Selkirk	0.05 %
Long Spruce	21.05 %	Laurie River	0.16 %		
Kelsey	4.93 %	Billion kWh generated	0.1	Purchases (excl. wind)	0.65 %
Jenpeg	1.24 %	Laurie River #1	0.08 %	Billion kWh purchased	0.2
		Laurie River #2	0.08 %		
Winnipeg River	12.19 %			Wind	1.17 %
Billion kWh generated	4.2			Billion kWh purchased	0.4
Seven Sisters	3.48 %				
Great Falls	2.99 %				
Pine Falls	2.00 %				
Pointe du Bois	0.93 %				
Slave Falls	1.48 %				
McArthur	1.31 %				

## Manitoba Hydro Generating Stations and Capabilities

For the Year Ended March 31, 2011

### Interconnected Capabilities

Station	Location	Number of units	Net Capability (MW)
Hydraulic			
Great Falls	Winnipeg River	6	136
Seven Sisters	Winnipeg River	6	165
Pine Falls	Winnipeg River	6	89
McArthur	Winnipeg River	8	55
Pointe du Bois	Winnipeg River	16	77
Slave Falls	Winnipeg River	8	67
Grand Rapids	Saskatchewan River	4	479
Kelsey	Nelson River	7	250
Kettle	Nelson River	12	1 220
Jenpeg	Nelson River	6	133
Long Spruce	Nelson River	10	1 010
Limestone	Nelson River	10	1 340
Laurie River (2)	Laurie River	3	10
Thermal			
Brandon		3	333
Selkirk		2	125

## Isolated Capabilities

Diesel
Bro

Brochet	3
Lac Brochet	2
Shamattawa	3
Tadoule Lake	2

Total Generating Capability 5 499

# Manitoba Hydro-Electric Board



Victor H. Schroeder, QC Chairman



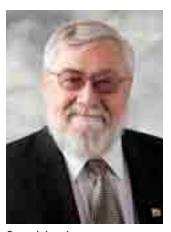
Phil Dorion



Dr. John Loxley



David Friesen



Gerard Jennissen



Ken Paupanekis



Garry Leach



Michael Spence



Leslie Turnbull



William C. Fraser, FCA



Jim Husiak

## Manitoba Hydro Senior Officers



Robert B. Brennan, FCA
President and Chief Executive Officer



Ken R.F. Adams, P. Eng Senior Vice-President, Power Supply



Vince A. Warden, CMA, FCMA Senior Vice-President, Finance & Administration and Chief Financial Officer



E. Ruth Kristjanson, BA (Hons), MA Vice-President, Corporate Relations



Ken M. Tennenhouse, LL.B General Counsel and Corporate Secretary



Ed T. Tymofichuk, P. Eng Vice-President, Transmission



G. Brent Reed Vice-President, Customer Service & Distribution



C.E. (Lyn) Wray, CA, MA Vice-President, Corporate Planning & Strategic Analysis



Lloyd Kuczek, P. Eng, MBA Vice-President, Customer Care & Marketing

## Glossary

## **Utility terms**

Demand: The size of any load, expressed in kilowatts (kW), averaged for a specified period of time.

**Distribution system**: The poles, conductors and transformers that deliver electricity to customers. The distribution system transforms high voltages to lower, more usable levels. Electricity is distributed at 120/240 volts (V) for most residential customers and 120 to 600 V for the majority of commercial customers.

**Energy**: Electrical utilities sell electrical energy to their customers who, in turn, convert this energy into a desirable form — such as work, heat, light, or sound. Electrical energy is measured in kilowatt hours (kWh).

Generator: A machine that converts mechanical energy — such as a rotating turbine driven by water, steam, or wind — into electrical energy.

**Natural gas:** A fossil fuel made from hydrocarbons stored millions of years ago when plants and other materials were buried in the earth's crust. Composed mostly of methane — a colourless and non-toxic substance — natural gas creates virtually no unburned particles or smoke to pollute the atmosphere. The products of combustion are chiefly carbon dioxide and water.

PUB: The Public Utilities Board. The provincial government's regulatory body through which all of Manitoba Hydro's electricity and natural gas rate applications must be approved before rate increases or decreases can become implemented.

**Power grid**: A number of interconnecting electrical power systems linking together electrical utilities and covering a large geographical area.

**Transmission system**: The towers, conductors, substations and related equipment involved with transporting electricity from generation source to areas for distribution — or to the power systems of out-of-province electrical utilities.

## Units of measure

BTU: British Thermal Unit. The amount of energy required to raise the temperature of one pound of water one degree Fahrenheit, equalling roughly 1 000 kilowatts (kW).

Gigajoule: A measure of energy for natural gas equalling one billion joules or one million BTUs. One gigajoule of energy is equivalent to that provided by approximately 278 kilowatt hours of electricity or 30 litres of gasoline.

Gigawatt (GW): The unit of electrical power equivalent to one billion watts or one million kW.

Joule: A measure of energy for natural gas.

Kilovolt (kV): The unit of electrical pressure, or force, equivalent to 1 000 volts (V).

**Kilowatt hour (kWh):** The basic unit of electrical energy by which electricity is measure. For example, 10-100 W light bulbs switched on for one hour equals one kilowatt hour (1 000 W for one hour).

Megawatt (MW): The unit of electrical power equivalent to one million watts, or 1 000 kilowatts (kW).

