

# 2009

Shaping the Promise of Renewable Energy



**WUSKWATIM**  
Power Limited Partnership

2009-2010 Year in Review

for the Year ended March 31, 2010





# Shaping

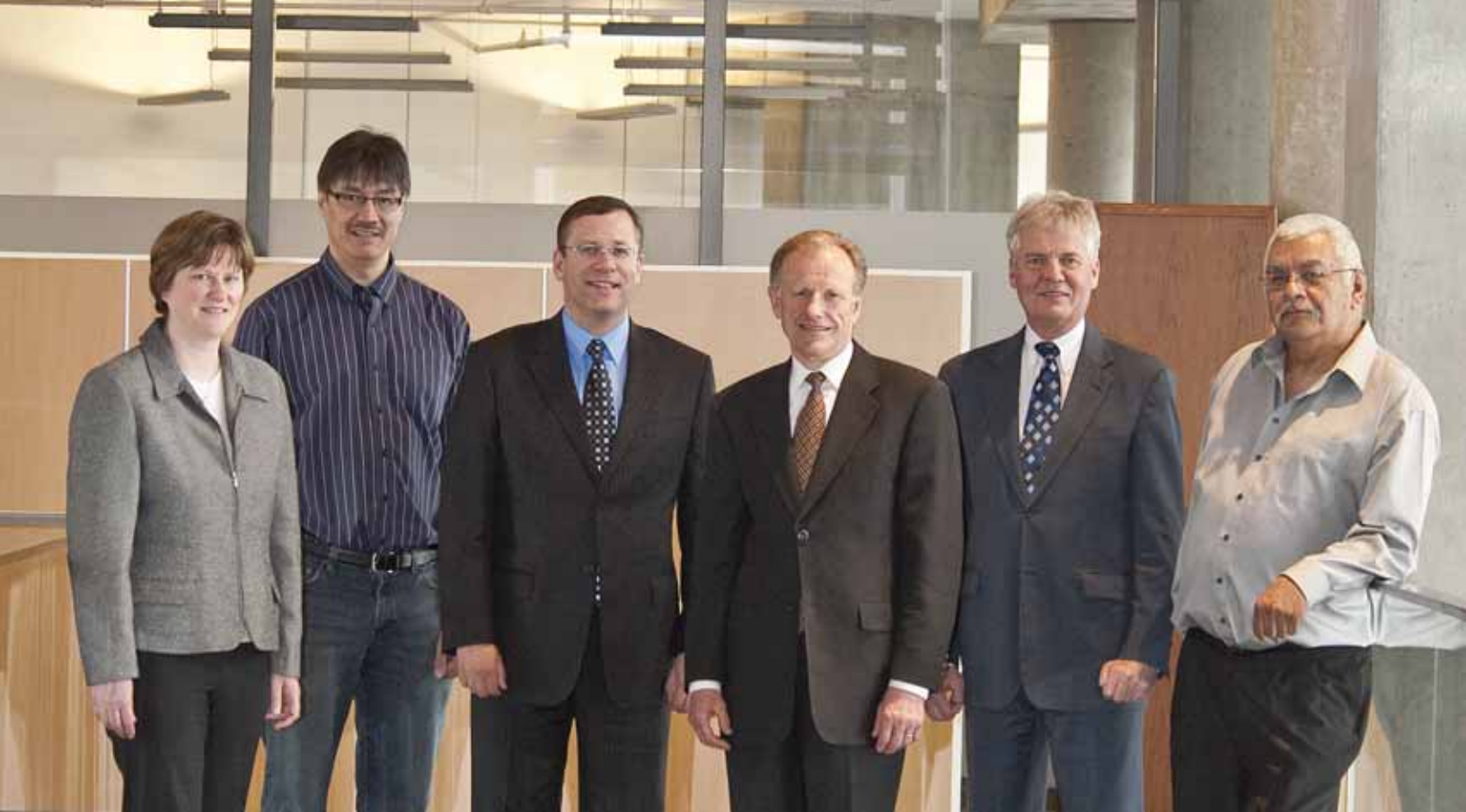
the Promise of Renewable Energy

Wuskwatim Power  
Limited Partnership  
2009-2010 Year in Review



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**Wuskwatim** is the first time in Manitoba and Canada that a First Nation and an electric utility have entered into a formal equity partnership to develop a hydroelectric project.

Located on the Burntwood River in northern Manitoba, the Wuskwatim Generating Station is being developed by Wuskwatim Power Limited Partnership (WPLP), a legal entity involving Manitoba Hydro and the Nisichawayasihk Cree Nation (NCN). This is the first time in Manitoba and Canada that a First Nation and an electric utility have entered into a formal equity partnership to develop a hydroelectric project. Manitoba Hydro is providing construction and management services to WPLP in accordance with the Project Development Agreement (PDA) signed in June 2006.



**WUSKWATIM**  
Power Limited Partnership

**Directors of the general partner of WPLP (L to R)**

- Joanne Flynn (Manitoba Hydro)
- Marcel Moody (Nisichawayasihk Cree Nation)
- Darren Rainkie (Manitoba Hydro)
- Ken Adams (Manitoba Hydro)
- Vince Warden (Manitoba Hydro)
- Jimmy Hunter-Spence (Nisichawayasihk Cree Nation)

WPLP'S SECOND CONSTRUCTION UPDATE FILM FOR THE WUSKWATIM PROJECT PROVIDES VIDEO DOCUMENTATION OF 2008-2009 CONSTRUCTION PROGRESS, AND IS AVAILABLE IN ENGLISH AND CREE ON THE WPLP WEB SITE – [WWW.WUSKWATIM.CA](http://WWW.WUSKWATIM.CA)

# Message From the Chair

Wuskwatim Power Limited Partnership (WPLP) presents its fourth Year in Review for the fiscal year 2009-2010. This year, an important project milestone was reached with the start of concrete placement on the station's spillway structure in May 2009. Since this time, activities associated with the project's General Civil Works Contract have continued at a steady pace. All of the concrete work for the Spillway is now complete and the installation of gates and hoists will begin in early spring 2010. In the Service Bay and Powerhouse areas, special measures were taken to allow concrete work to continue throughout the winter months. This year also saw the installation and commissioning of Wuskwatim's 275-metric-ton-capacity powerhouse crane, the largest capacity crane in a Manitoba generating station. WPLP's second Construction Update film for the Wuskwatim Project provides video documentation of 2008-2009 construction progress, and is available in English and Cree on the WPLP Web site – [www.wuskwatim.ca](http://www.wuskwatim.ca). Project employment peaked this past year at just under 1,100 workers, considerably higher than in previous years because of increased construction activity. Aboriginal and Manitoba workers continued to comprise a significant proportion of the workforce – from the start of construction to March 2010, 44 percent

of project hires have been Aboriginal and 69 percent of the total project hires were from Manitoba. During the course of building a generating station, most jobs are for a relatively short period of time and the types of skills required change as the project unfolds. Many of the jobs available at the site require specialized trades and some type of industrial construction experience. In many cases, workers outside Manitoba were needed to provide these specialized services.

Creating one of the safest construction site safety records in the Province of Manitoba is a priority for the Project. All project employees are provided with a comprehensive site-specific safety orientation upon hire, and the active participation by all involved in the project assists in creating safe working conditions.

Total wages earned at the site from the start of construction on the Wuskwatim Generation Project to March 2010 were approximately \$106.8 million. Nearly 68 percent of these wages were associated with direct Manitoba employment. From the start of construction to March 2010, WPLP also spent \$122.3 million on goods and services purchased from Northern Manitoba Aboriginal businesses, including several contracts with entities owned by Nisichawayasihk Cree Nation.

Cross-cultural training sessions, cultural ceremonies and counseling services are being managed and provided at site by Nisichawayasihk Cree Nation and are available to all employees. Cross-cultural training sessions increased substantially throughout the past year to ensure all site workers participated. Cross-cultural workshops and traditional ceremonies were designed to express respect for the environment and for local culture.

A comprehensive environmental protection program continued throughout the year – details and results are available in the WPLP Wuskwatim Monitoring Overview 2009-10, which is available at [www.wuskwatim.ca](http://www.wuskwatim.ca). The majority of civil works for the Wuskwatim Generating Station are scheduled to be complete and the first of the three units is expected to enter service in late 2011 or early 2012. The next twelve months will continue to generate a significant amount of project effort that will shape the promise of renewable energy.

Sincerely,



Ken R. F. Adams, P. Eng.  
Chair of the general partner of Wuskwatim Power Limited Partnership (5022649 Manitoba Ltd.)



WUSKWATIM GENERATION PROJECT NOW UNDER CONSTRUCTION ON THE BURNTWOOD RIVER IN NORTHERN MANITOBA WILL ADD TO MANITOBA'S ENERGY-GENERATION ASSETS.

# Introduction and Background

The province of Manitoba with a large, self-renewing supply of waterpower has developed many hydroelectric generating stations to provide electrical energy for its citizens. The Wuskwatim Project is the first generating station to be built in Manitoba since completion of Limestone in 1992, and it marks the first time in Canada that a First Nation and an electric utility have entered into a formal equity partnership arrangement to develop a hydroelectric project. The Wuskwatim Generation Project, now under construction on the Burntwood River in northern Manitoba will add to Manitoba's energy-generation assets and will help to meet the future domestic needs of Manitoba and those of export customers.

Wuskwatim Power Limited Partnership (WPLP), involving Nisichawayasihk Cree Nation (NCN) and Manitoba Hydro, is responsible for the development, operation and maintenance of the 200-megawatt Wuskwatim Generation Project. The project is located in NCN's traditional territory downstream of Wuskwatim Lake at Taskinigup Falls and will produce clean, renewable hydroelectric power.

NCN and Manitoba Hydro spent nearly a decade discussing, planning and undertaking the environmental studies and regulatory processes for the \$1.3 billion Wuskwatim Generation Project. In June 2006 senior Manitoba Hydro officials and NCN's Chief and Council signed the Project Development Agreement (PDA) and construction commenced in August 2006.

Through its wholly-owned corporation, Taskinigahp Power Corporation (TPC), NCN currently owns 33 percent of the Wuskwatim Generating Station. TPC has until the first of the three units comes into service, anticipated to be late 2011 or early 2012, to decide whether or not it wants to retain this level of ownership.

The business affairs of WPLP are carried out by a general partner (GP), 5022649 Manitoba Ltd., a wholly owned Manitoba Hydro subsidiary. The GP is governed by a Board of Directors consisting of two NCN and four Manitoba Hydro representatives. Pursuant to the PDA, Manitoba Hydro has been contracted to construct, manage, operate and maintain the Wuskwatim Generating Station.



2009 - 2010

## Year In Review

Construction of the Wuskwatim Generating Station continued at a considerable pace throughout 2009. Concrete placement for the station's spillway structure began in May 2009 marking an important milestone. Since then, intense General Civil Works activities have seen the placement of approximately 65,000 cubic metres of the station's 120,000 cubic metres of concrete in the Spillway, Powerhouse, Service Bay and other associated structures. All concrete work for the Spillway is now complete and installation of gates and hoists began in early spring 2010. Enclosing and heating the Service Bay and Powerhouse areas allowed concrete work to continue throughout the winter months when temperatures often dip below -40°C. Wuskwatim's 275-metric-ton powerhouse crane – the largest capacity crane in a Manitoba generating station – was also installed and commissioned this year.

Increased construction activity resulted in project employment peaking at just under 1,100 workers this year, considerably higher than in past years. Aboriginal workers continued to be a significant part of the workforce, comprising 44 percent of all hires from construction start to

March 2010. WPLP has also purchased \$122.3 million in goods and services from Northern Manitoba Aboriginal businesses, including several contracts with Nisichawayasihk Cree Nation-owned entities.

Nisichawayasihk Cree Nation also provides and manages cross-cultural training sessions, cultural ceremonies and counseling services at site, available to all employees. Activity on this contract increased substantially over the past year to ensure all site workers participated in cross-cultural training. Workshops and traditional ceremonies demonstrate respect for the environment and local culture.

A comprehensive environmental-protection program was ongoing this year, including

environmental protection plans, along with environmental, social and economic monitoring

plans. Environmental protection plans provide measures to protect the environment, minimize adverse effects from construction activities and decommission and rehabilitate sites.

Environmental monitoring and management programs are being conducted in accordance with monitoring and management plans approved by provincial and federal regulatory agencies. Ethinesewin, the traditional knowledge and collective wisdom of the Nisichawayasihk people, along with conventional scientific analysis, continue to be used equally for project monitoring activities. Monitoring programs began before construction and will continue throughout construction and well into project operation. Key monitoring activities over the past year included: completion of a Worker and Family Survey among Nisichawayasihk Cree Nation Citizens; a review of fish-passage and other conditions at stream crossings along the project's 48-kilometre access road; monitoring sediment and erosion processes upstream and downstream of the station; investigating heritage resources during key construction activities; conducting ongoing monitoring



of the project site and surrounding areas by Nisichawayasihk Cree Nation representatives; and during the winter of 2010, fish habitat compensation projects also began throughout the future forebay area.

The following is a summary of achievements on the Wuskwatim Generating Project during 2009-10.

### Construction Camp

The construction camp provides:

- Housing for over 700 workers
- A central kitchen and dining hall
- Support facilities – water treatment plant, sewage lagoon, ambulance/fire building
- A recreation centre – gym, racquetball courts, exercise room, pool tables, television and Internet
- A chapel, restaurant/lounge and sports field
- A Cultural Centre for cultural awareness training and counseling services.

### Structures Excavation

Structures excavation was completed in February 2009 with excavations totalling 1,178,000 cubic metres of soil and bedrock.

### Concrete Placement

Concrete placement began May 17, 2009 with approximately 66,500 cubic metres of concrete placed by year end consisting of:

- Spillway – 10,000 cubic metres – only one cubic metre for curbs remains to be poured in summer 2010
- Service Bay – 16,100 cubic metres
- Intake – 13,500 cubic metres
- Powerhouse – 22,950 cubic metres
- Tailrace – 750 cubic metres
- Miscellaneous Structures – 3,200 cubic metres.

Enclosing and heating the Service Bay, Powerhouse and Tailrace area allowed concrete placement to continue over the winter uninterrupted by sub-freezing weather.

### Powerhouse Crane

The 275-metric-ton Powerhouse Crane will play a key role in generating-station construction and installation of its three 66-megawatt turbine generators. Crane installation occurred in two phases between November 2009 and the end of March 2010:

- Phase 1, completed in November was a four-day job involving lifting and assembling the main girder, auxiliary girder and trolley on the crane rail 35 feet above the service bay floor
- Phase 2, started March 1, 2010 and included commissioning and installation of the single largest lift capacity crane in a Manitoba generating station.



## Major Contracts

Manitoba Hydro, acting as Project Manager:

Awarded contracts for...

- Supply and Installation of Electrical and Mechanical Systems and Services
- Supply and Delivery of Motor Control Centers
- Supply and Installation of Powerhouse and Service Bay Elevators.

Continued to oversee work underway for the following contracts...

- General Civil Works Contract
- Generator Step-up Transformers
- Supply of Intake Gates, Guides and Hoists
- Supply and Installation of Powerhouse Crane
- Supply and Installation of Spillway Gates, Guides and Hoists
- Supply and Installation of Turbines and Generators.

## Project Monitoring

Manitoba Hydro acting as management service provider:

- Conducted analyses of project employment, labour income, purchases and other economic indicators for the fourth year of construction activities



- Conducted an archaeological investigation on the north and south shore between Wuskwatim and Taskinigup Falls prior to clearing of trees in the forebay and a survey of the southeast shore of Wuskwatim Lake. Both the south shore between the falls and the southeast shore of Wuskwatim Lake are previously recorded archaeological sites. Artifacts were recovered from these two sites including stone tools, animal bones, a corroded spoon and a late historic wood-handled fork. No artifacts were recovered from the north shore area during the investigation.
- Conducted monitoring and modified construction as required to prevent water quality issues during construction of the boat launches, breakwater and concrete batch plant water intake, which were in-stream works
- Conducted baseline evaluation of aquatic furbearers to determine the current locations of beaver dams and muskrat push-ups upstream, downstream and on Wuskwatim Lake for comparison purposes once the station is in operation.

NCN and Manitoba Hydro, jointly:

- Completed a Worker-Family Survey to monitor project impacts on NCN project workers and their families and the community as a whole – results of the survey have been summarized in an NCN newsletter.

NCN, under contract and as part of the project:

- Conducted 80 cross-cultural awareness training workshops since the start of construction, which have been attended by a total of 1,110 workers – activities over this period were increased significantly to accommodate the expansion in the construction workforce associated with the initiation of General Civil work
- Performed 23 ceremonies and sweats since the start of construction, including most recently five sweat lodge ceremonies and one pipe ceremony
- Implemented culturally appropriate, retention-support programs aimed at keeping Aboriginal workers employed on the project and ensuring that sensitivity and respect for local culture is present throughout construction – new employment initiatives included hiring an Employee Liaison Officer to serve as an employee representative/ombudsman, and a Shuttle Van Service that runs from the site to Thompson and Nelson House to accommodate workers without vehicles
- Involved Elders and youth in the sharing of Ethinesewin, the traditional knowledge and wisdom of the Nisichawayasihk people, to ensure appropriate protection of aquatic and terrestrial environments.





### Aboriginal Participation

Achievements in Aboriginal participation on the project included:

- Project employment levels that peaked at just under 1,100 workers during the year with approximately 44 percent of project hires identified as Aboriginal since the start of construction
- Expenditure of nearly \$22 million during the past year on goods and services purchased from Northern Manitoba Aboriginal businesses for a total of \$122.3 million spent with Northern Manitoba Aboriginal businesses since the project began
- Providing cross-cultural awareness training sessions conducted by NCN-trained facilitators with the involvement of NCN Elders
- Conducting site ceremonies at key milestones using NCN Spiritual/Traditional Citizens to show respect for local culture and traditions
- Using Talking Stick Circles where appropriate, as a method to resolve conflict in the workplace as part of the Employee Retention Measures
- Involving Elders and community Citizens in an open house to share results of monitoring programs
- Hiring of an Employee Liaison Officer to act as an employee representative at site and to assist NCN Citizens and others interested in employment at Wuskwatim.



### Transmission Project

Manitoba Hydro is responsible for constructing the Transmission Project which is scheduled for completion by summer 2011. Activity this past year included:

- Completion of transmission line construction from Wuskwatim to Herblet Lake
- Completion of right-of-way clearing for the transmission line from Herblet Lake to Ralls Island
- Ongoing line construction over two winter seasons for completion by April 2011
- Completion of control building installations at both Birchtree and Wuskwatim switching stations
- Ongoing electrical-apparatus installation at the Thompson Birchtree Station, Wuskwatim Switching Station, Herblet Lake Station and Ralls Island Station for expected completion by fall 2010
- Completion of electrical-equipment foundation work at Ralls Island.

### Safety

Safety-related items during the year included:

- 32 lost-time injuries resulting in 909 days lost, a noticeable increase compared to 2008/09 – this was due to the significant increase in workers on site and two workers sustaining on-the-job injuries that resulted in an extended period of time away from site
- Provision of a comprehensive site-specific safety orientation for all employees.



# Financial Report

## Partnership Assets, Liabilities and Equity (as at March 31)

| (in millions of dollars)                      | 2010  | 2009 |
|---|-------|------|
| <b>ASSETS</b>                                 |       |      |
| Construction in Progress - Generating Station | 812   | 508  |
| Construction in Progress - Transmission Line  | 233   | 173  |
| Other Assets                                  | 9     | 18   |
|   | 1,054 | 699  |
| <b>LIABILITIES AND EQUITY</b>                 |       |      |
| Long-term Debt                                | 804   | 543  |
| Other Liabilities                             | 61    | 37   |
| Equity  | 189   | 119  |
|   | 1,054 | 699  |

### Partners' Capital (as at March 31, 2010)

|                               | Units       | %      | Capital<br>(in millions of dollars) |
|-------------------------------|-------------|--------|-------------------------------------|
| General Partner <sup>1</sup>  | 18.933      | 0.01   | -                                   |
| Manitoba Hydro                | 126,834.400 | 66.99  | 127                                 |
| Taskinigahp Power Corporation | 62,480.000  | 33.00  | 62                                  |
|                               | 189,333.333 | 100.00 | 189                                 |

### Financing and Investing Activities (for the year ended March 31)

| (in millions of dollars)                      | 2010  | 2009  |
|---|-------|-------|
| <b>FINANCING ACTIVITIES</b>                   |       |       |
| Proceeds from issue of units of WPLP          | 70    | 45    |
| Net proceeds from long-term debt              | 261   | 224   |
| Cash provided by financing activities         | 331   | 269   |
| <b>INVESTING ACTIVITIES</b>                   |       |       |
| Construction in Progress – Generating Station | (280) | (182) |
| Construction in Progress – Transmission Line  | (52)  | (86)  |
| Other   | 1     | (1)   |
| Cash used for investing activities            | (331) | (269) |

<sup>1</sup> The business affairs of WPLP are carried out by a general partner (GP), 5022649 Manitoba Ltd., a wholly-owned Manitoba Hydro subsidiary.







**WUSKWATIM**  
Power Limited Partnership

**[www.wuskwatim.ca](http://www.wuskwatim.ca)**

Wuskwatim Power Limited Partnership

360 Portage Avenue

P.O. Box 815 Winnipeg, MB R3C 2P4

Telephone: (204) 360-7192

Fax: (204) 360-6131