

2017 05 10

Mr. R. Matthews, P. Geo. Manager, Water Use Licensing Manitoba Sustainable Development Box 11, 200 Saulteaux Cres. Winnipeg MB R3J 3W3

Dear Mr. Matthews:

RE: WUSKWATIM GENERATING STATION FINAL LICENCE REQUEST

5022649 Manitoba Ltd. is submitting two copies of Manitoba Hydro report #WP&O 17-05 entitled "Wuskwatim Generating Station Report in Support of a Request for a Final Licence under *The Water Power Act* and Regulations" as supporting documentation in the Wuskwatim final licence process. This report provides details regarding the Wuskwatim Power Limited Partnership's (WPLP) compliance with all terms and conditions of *The Water Power Act* Interim Licence, and pursuant Regulations.

Included in the submission is a drawing showing the severance line and lands of the province required for the Wuskwatim project. The drawing has been sealed and signed by a professional engineer in accordance with Section 44(g) of the Regulations. The report and drawing are provided in both paper and electronic formats.

Please confirm your receipt of this documentation and advise me on any outstanding issues related to obtaining a final licence for the Wuskwatim GS. Should you have any inquires on this matter or additional process requirements, please contact Wes Penner at 204-360-3018.

Yours truly, Original signed by, L.E. Midford

L.E. Midford Chair of the General Partner of Wuskwatim Power Limited Partnership 5022649 Manitoba Ltd.

LEM/jb Att. HYDRAULIC OPERATIONS DEPARTMENT WHOLESALE POWER & OPERATIONS DIVISION GENERATION & WHOLESALE

WUSKWATIM GENERATING STATION REPORT IN SUPPORT OF A REQUEST FOR A FINAL LICENCE UNDER THE WATER POWER ACT AND REGULATIONS





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DATE:

2017-05-10

REPORT NO:

WP&O 17-05

ENGINEERS GEOSCIENTISTS MANITOBA Certificate of Authorization Manitoba Hydro No. 38

IMPORTANT

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R. MATTHEWS (MANITOBA SUSTAINABLE DEVELOPMENT) WUSKWATIM POWER LIMITED PARTNERSHIP CORPORATE LIBRARY LAW DEPARTMENT

EXECUTIVE SUMMARY

This document demonstrates that 5022649 Manitoba Ltd. as general partner of the Wuskwatim Power Limited Partnership (WPLP) has fulfilled all obligations required to obtain a Final Licence under *The Water Power Act C.C.S.M. c. W60 (The Water Power Act)* for the Wuskwatim Generating Station (GS). The document provides details on the observances of all the terms and conditions under the Interim Licence and Manitoba Regulation 25/88R pursuant to *The Water Power Act* (the Regulation). The documentation is provided to assist the Minister Responsible for *The Water Power Act* in the determination to issue a Final Licence for the Wuskwatim GS. Manitoba Hydro has prepared this document on behalf of WPLP.

Wuskwatim GS is the first in Manitoba to be constructed in partnership between a First Nation – Nisichawayasihk Cree Nation (NCN) and Manitoba Hydro-Electric Board (Manitoba Hydro), and the first to be licensed under federal and provincial environmental legislation. It has an installed capacity of 209.1 MW and is located 56 kilometres directly southwest of Thompson (35 kilometres southeast of Nelson House) at Taskinigup Falls near the outlet of Wuskwatim Lake.

The Wuskwatim GS was constructed under the authority of an Interim Water Power Act Licence issued on July 10, 2006. Project construction was completed between 2006 and 2012 with the first unit coming online in June 2012, and the last of 3 units being operational in October 2012. WPLP submitted a request for Final Licence on June 3, 2015 after nearly three years of operating experience. Wuskwatim GS is licensed under *The Environment Act (Manitoba)*, and has received federal approval under the *Canadian Environmental Assessment Act* and authorizations under the Federal *Navigable Waters Protection Act*, and the *Fisheries Act*.

Division 1 of this document provides an overview of the project. It also provides a brief summary of the predevelopment engagement with NCN, and stakeholders, Crown consultations and licensing processes. Ongoing monitoring and reporting of licence compliance and environmental impacts is also summarized. Division 2 of this document shows how the WPLP has fulfilled specific terms of the Interim Licence. Division 3 of this report demonstrates how the WPLP, has fulfilled the articles of the Regulation pertaining to an Interim Licensee and which require a statement indicating observance.

The Regulation states that upon fulfillment and compliance with all the terms and conditions of the Interim Licence and of the Regulation, the licensee shall be entitled to a Final Licence. Furthermore the Interim Licence states the Final Licence shall be fifty (50) years from the date of the initial development and shall be subject to renewal or extension. Therefore the Final Licence, if granted, would expire fifty years from the date of the initial development on June 22, 2012. Prior to expiry, on June 22, 2062, the WPLP would apply for a Renewal Licence and Manitoba Sustainable Development would review the project and its operation in order to assist in the determination to issue a Renewal Licence.

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Division 1 – Introduction

Report Overview

This division provides background information in support of Divisions 2 and 3, which comprise the main focus of this report. It includes a brief project description, history of the predevelopment engagement with the Nisichawayasihk Cree Nation (NCN), regulatory processes resulting in approvals and authorizations preceding the start of construction, and Crown and proponent consultations. This division also highlights the purpose and licensing process of *The Water Power Act* and summarizes the monitoring and reporting pertaining to Wuskwatim GS and vicinity. Divisions 2 and 3 provide details on how the Wuskwatim Power Limited Partnership (WPLP) fulfilled its obligations with respect to the Interim Licence and the Regulation. Division 2 of this document shows how WPLP has fulfilled specific terms of this Interim Licence. Division 3 of this report demonstrates how WPLP has fulfilled the articles of the Regulation pertinent to an Interim Licensee and which require a statement indicating observance. The selection of pertinent articles of the Regulation was agreed to by Manitoba Sustainable Development (MSD)). Previous names of MSD in this document were Manitoba Conservation and Water Stewardship as well as Manitoba Water Stewardship.

Project Description

The Wuskwatim GS is located on the Burntwood River, as shown on Figure 1 (page 33). An Interim *Water Power Act* licence for the project was issued on July 10, 2006. Construction at the Wuskwatim site began in 2006 with the development of supporting infrastructure which included power services, construction camps, work areas, service and access roads, and the Stage I and II cofferdams.

The Wuskwatim GS was constructed in accordance with the general construction plans required by Interim Licence term 3.1 and sections 21 to 23 of the Water Power Regulation. The principal physical works of the Wuskwatim GS are described below. A photograph showing the key features is shown on Figure 2 (page 34). The general arrangement of the station is shown on Figure 3 (page 35). The project was fully operational on October 6, 2012 with the commissioning and release of the third and final turbine for commercial service.

- (a) The Powerhouse Complex includes the powerhouse, intake, and service bay, and is a concrete gravity structure located on bedrock close to the north bank of the original channel of the Burntwood River. The powerhouse has three fixed-blade propeller turbines and generators each with a nameplate rating of 69.7 MW at 21.05 metres of head. This provides a total plant capacity of 209.1 MW or 280,408 horsepower.
- (b) The Spillway, located to the north of the powerhouse, is a concrete gravity structure that includes three sluiceways and is linked to the powerhouse via a concrete Non-Overflow gravity dam. The sluiceways are equipped with vertical lift, fixed wheel steel gates and various mechanical and electrical systems needed for its operation and control.
- (c) The Non-Overflow gravity dam links the Powerhouse Complex and Spillway and provides continuous access from the North Dyke to the crest of the Main Dam.

- (d) The Main Dam and North Dyke are earthfill structures, constructed from earth and rock fill materials. The Main Dam spans from the south bank of the Burntwood River above Taskinigup Falls to the south Transition Structure and the Powerhouse Complex. The North Dyke spans from the north wall of the Spillway to the north bank of the Burntwood River.
- (e) The Transition Structure is a concrete gravity structure that connects the Powerhouse Complex to the Main Dam.
- (f) The Excavated Materials Placement Area (EMPA), located on the north river bank between Wuskwatim Lake and Wuskwatim GS, consists of excavated earthfill material from construction activities and acts together with the above works to contain the immediate forebay area.
- (g) Channel excavations at the outlet of Wuskwatim Lake have improved the lake's outflow capability and increased the station's efficiency.
- (h) Channels include spillway approach and discharge channels and the powerhouse intake and tailrace channels.

Predevelopment Engagement with Nisichawayasihk Cree Nation (NCN)

Article 8 of the 1996 Northern Flood Agreement Comprehensive Implementation Agreement (CIA) between Manitoba Hydro and the Nisichawayasihk Cree Nation provides for advance planning and consultation on any future development in the Nelson House Resource Management Area (RMA). At the 1997 Annual Meeting under the CIA, Manitoba Hydro informed NCN that the Wuskwatim GS project was being considered for development.

Consistent with the 1996 Agreement, the two parties began a joint planning process in 1999. As part of this new phase of capital development Manitoba Hydro made a corporate decision to consider aboriginal financial participation and income opportunities in northern Manitoba. Based on this decision, a multi-year consultation and negotiation process was conducted from 1999 to 2007 between Manitoba Hydro and NCN Chief and Council, NCN Members and residents. The intent was to establish dialogue with NCN members, to assess negative and positive effects of the development, to discuss and negotiate business arrangements, and to prepare the groundwork for NCN participation in the regulatory process.

NCN established a Future Development Team and NCN with Manitoba Hydro established a Working Group to exchange information and facilitate engagement regarding the potential Wuskwatim GS. Over a span of thirteen years, the parties participated in a collaborative planning and public consultation process, a detailed environmental impact assessment, a Project Development Agreement (PDA), a comprehensive regulatory review, and established the Wuskwatim Power Limited Partnership (WPLP). NCN was actively involved with Manitoba Hydro in all aspects of planning and constructing the Wuskwatim GS.

Prior to 2001, initial engagement activities focused on NCN members residing at Nelson House, South Indian Lake, Thompson and other locations. This stage of engagement carried out over several years and involved approximately 20 community workshops and 80 meetings, and discussed initial planning relevant to NCN and Manitoba Hydro. This included the negotiation of key aspects of the project, such as the choice of a low head design. In 2000, Manitoba Hydro and NCN jointly decided to replace the initial high-head dam concept with a low-head design that resulted in less than one-half of one square kilometer of flooding, with no significant adverse effects on the biophysical or socio-economic environments, at the expense of a reduced installed capacity. NCN was also involved in the selection of a consultant Environmental Management Team to undertake an environmental assessment, which included the design, implementation and review of environmental assessment studies, development and implementation of a joint Public Involvement Plan (PIP), and development of an Environmental Impact Statement (EIS) submission for regulatory approvals.

Engagement with NCN members has occurred on all aspects of the project located within the Nelson House RMA. This included assessment of alternative road and construction camp locations and portions of the transmission lines. NCN members have played key roles in gathering field information, providing Aboriginal Traditional Knowledge to the studies conducted for the project, and developing cultural ceremonies to assist in mitigating project effects.

Engagement with NCN continues through various venues including the Monitoring Advisory Committee, which is a joint MH/NCN committee overseeing biophysical and socio-economic monitoring activities as well as Ethinesewin Traditional Knowledge. Ethinesewin is the traditional knowledge and collective wisdom of Nisichawayasi Nehethowuk (the people from where the three rivers meet and who speak the language of the four winds) that has been communicated orally for generations.

The Partnership

The Wuskwatim Power Limited Partnership (WPLP) owns the Wuskwatim GS. The Partnership was formed shortly after the June 2006 signing of the Wuskwatim Project Development Agreement (PDA). It consists of the General Partner (5022649 Manitoba Ltd.), Manitoba Hydro, and NCN's wholly owned Taskinigahp Power Corporation (TPC). The General Partner is a wholly owned subsidiary of Manitoba Hydro and manages the business of the partnership. Through TPC, NCN owns 33 percent of the Wuskwatim GS, Manitoba Hydro owns 66.9 percent, while the General Partner defines 0.1 percent of the partnership. WPLP represents the first time Manitoba Hydro has entered into a partnership with a First Nations community on a generating station project. In its development, WPLP focused on maximizing business, training, job opportunities, and income for NCN.

Manitoba Hydro was contractually responsible for the construction of Wuskwatim GS and continues to be for ongoing management, operation and maintenance of the Wuskwatim GS for WPLP. By agreement with WPLP, Manitoba Hydro accepted responsibility to (a) obtain and maintain all licences, permits, orders, authorizations and approvals and maintaining compliance with the terms and conditions of these; and (b) operate the project as part of the integrated system. In addition to these agreements, Manitoba Hydro buys all energy produced by Wuskwatim GS in accordance with terms and conditions defined in a power purchase agreement with WPLP.

Manitoba Hydro has prepared this report in support of WPLP's request for a Final Licence submitted on June 3, 2015. A copy of the Final Licence request is shown in Appendix E on page 99.

Public Engagement

Manitoba Hydro and NCN jointly developed a Public Involvement Plan (PIP) that provided the public - particularly those potentially affected by the Wuskwatim GS project - with early and ongoing opportunities to receive information and provide their views. Between 2001 and 2004, five rounds of consultation were carried out. The process involved 18 communities and 23 non-government organizations including the Manitoba Eco Network, which coordinated information flow to its 33 member organizations. Engagement activities included open houses, newsletters, workshops, meetings with resource users, and negotiations with community leaders and various stakeholders. Overall the PIP targeted a wide range of communities, interest groups and individuals in northern Manitoba, as well as interest groups and the public in Winnipeg. Downstream Nelson River First Nations involved in the PIP included Tataskweyak Cree Nation (TCN), War Lake, York Factory, and Fox Lake. Selected communities included Pikwitonei, Thicket Portage, and Wabowden.

Preconstruction Environmental Regulatory Approvals and Authorizations

The Wuskwatim GS is the first hydroelectric facility in Manitoba to have undergone a full environmental review as *The Environment Act* did not come into effect in Manitoba until 1988, and the *Canadian Environmental Assessment Act* came into effect in 1992. The Wuskwatim GS fit the description of a Class 3 development defined in the Classes of Development Regulation 164/88, under *The Environment Act (Manitoba)*. In addition, it required a *Canadian Environment Act* Comprehensive Study, a federal *Fisheries Act* authorization and approvals under the federal *Navigable Waters Protection Act*.

The environmental regulatory review process for the Wuskwatim GS under *The Environment Act* was formally initiated with the filing of the Environment Act Proposal Form (EAPF) and attachments in December, 2001. Under the provisions of the Canada-Manitoba Agreement on Environmental Assessment Cooperation, Canada and Manitoba agreed to undertake a cooperative environmental assessment of the Wuskwatim GS with Manitoba taking the lead role. A Project Administration Team (PAT) was established to coordinate processes. The federal Department of Fisheries and Oceans (DFO) and Transport Canada were designated as Responsible Authorities with DFO assuming the primary federal role. The provincial Clean Environment Commission (CEC) was designated as the venue for public hearings on environmental issues.

In April, 2002 Manitoba Conservation issued guidelines for the preparation of an Environmental Impact Statement (EIS) for the Wuskwatim GS and a Participant Assistance Program was announced, in which representatives of the public could apply for funding to assist in their review of the EIS. The final guidelines were based on the output of four public meetings in northern (Thompson and The Pas) and southern (Winnipeg) Manitoba to review draft guidelines and receive public input.

The EIS for the Wuskwatim GS, as well as a submission on the project Need For and Alternatives (NFAAT), were posted on the public registry in April, 2003. Initially, it was assumed that the Public Utilities Board (PUB) would review the economics and financial aspects of the Wuskwatim GS. This process is routinely used to ensure that rate payers of Manitoba are

treated fairly. However, in June 2003 Manitoba Hydro and NCN were informed that the Minister of Conservation had made a decision that the public hearings through the Clean Environment Commission (CEC) would deal with both the EIS and the NFAAT documents.

As provided in the Regulation pursuant to *The Environment Act*, a proponent-funded Wuskwatim Participant Assistance Program was established to ensure that qualifying public organizations had access to resources required to participate properly in the CEC hearings. In July, 2003 Participant funding of over \$875,000 was awarded to 11 public applicants to become formally involved in both the pre-hearing processes and the formal CEC hearing proceedings, and several other presenters which included organizations and members of the public who attended and spoke only during the formal hearing proceedings.

Upon a thorough regulatory and public review of the EIS and NFAAT documents, Manitoba Hydro and NCN provided responses to information requests prior to the start of the CEC hearings. The CEC hearings were conducted between March and June, 2004, with 38 sessions in Winnipeg, The Pas and Thompson. They were the culmination of the most extensive and complex environmental and regulatory review in Manitoba's history. Due to the broad scope of the hearing process, representatives from many northern communities and environmental organizations were provided with an opportunity to state concerns and ask questions about Manitoba Hydro activities in northern Manitoba.

A final CEC report was released in October, 2004, which recommended the Province of Manitoba grant an Environment Act licence for the Wuskwatim Generation Project. In June, 2006, the Minister of Conservation issued Environment Act License No. 2699 to the WPLP for the construction, operation and maintenance of the Wuskwatim GS. An Interim Licence under the Water Power Act (WPA) was subsequently issued on July 10, 2006.

DFO, as the federal Responsible Authority, prepared a Comprehensive Study Report (CSR) on the Wuskwatim Project for review by the federal Minister of Environment. The CSR was submitted to the Canadian Environment Assessment Agency in November, 2005 for review and the final CSR report was submitted to the federal Minister of Environment in early June, 2006. In June, 2006 the Minister recommended that the Ministers of Fisheries and Oceans and of Transport Canada issue approvals for the Wuskwatim Generation Project.

All federal and provincial regulatory requirements, including licences were obtained following the completion of this comprehensive federal and provincial environmental review. This included public hearings and confirmation of the governments' position on Section 35 (the *Constitution Act*) consultations described below. Some of these regulatory statutes are *The Water Power Act (Manitoba)*, and *The Environment Act* (Manitoba), and authorizations under the *Canadian Environmental Assessment Act*, the *Navigable Waters Protection Act*, and the *Fisheries Act*.

Crown Consultation

As part of the licensing and permitting activities to be carried out by governments, and in accordance with Section 35 of the *Constitution Act*, a federal and provincial Crown Consultation process began in October, 2003. This process involved three phases with 11 communities: to

determine interest in the consultation process through initial contacts and meetings, to develop a consultation protocol that outlined a mutually acceptable consultation process with potentially affected First Nations and aboriginal communities, and to review concerns and document the consultation. The government consultation group was accompanied by a small team from Manitoba Hydro and NCN on most community visits. The consultations resulted in a report being delivered to the governments in early 2005 reporting on the process and concerns raised and potential impacts on treaty and aboriginal rights. After considering the report Cabinet authorized the issuance of necessary Provincial licences in July 2006. Granting of Federal permits also occurred after consideration of the report.

The Water Power Act

In Manitoba the right to develop water power is granted under the authority of *The Water Power Act C.C.S.M. c. W60 (The Water Power Act)* and Manitoba Regulation 25/88R pursuant to *The Water Power Act* (the Regulation). *The Water Power Act* is part of a suite of natural resource allocation acts through which the province allows various entities to develop Crown resources. *The Water Power Act* is broad in its application in that it pertains to all provincial water powers, Crown lands required in connection with the development, all lands required in connection with the development, the sale of power, all undertakings related to provincial water powers, and to all matters incidental thereto.

The Water Power Act allows for a licence to take on one of three main types: interim, final and renewal, depending on the stage of development. An interim licence is issued prior to start of construction subject to terms and conditions. Upon successful completion of the development and satisfaction of the Interim Licence terms and conditions and the Regulation, the licensee is expected to request a Final Licence. If granted, a Final Licence will expire in no more than fifty years. Between four and six years before expiry, the licensee is once again expected to apply for a Renewal Licence.

Interim Licence

Manitoba Hydro applied for an Interim Licence under *The Water Power Act* on June 4, 2003 to use and store Burntwood River water at the Wuskwatim GS site for power purposes. Manitoba Hydro submitted specific information requirements identified in the Regulation and other information identified by the director. In a July 8, 2005 letter, Manitoba Hydro requested that the application be amended by changing the name of the applicant to the Wuskwatim Power Limited Partnership. Upon the completion of Crown consultations and WPLP's acceptance of the terms and conditions of the Interim Licence, the Minister issued the Interim Licence on July 10, 2006.

Final Licence

Section 43(1) of the Regulation states "Upon the completion of the initial development according to the plans previously approved, and upon fulfillment and compliance otherwise with all the terms and conditions of his or her interim licence and of this regulation, the interim licensee shall be entitled to a final licence authorizing one or more of diversion, use, or storage of water at the site in question..." Furthermore Interim Licence term 7.2(f) states "In accordance with Section

45 of the Water Power Regulation, the term of the Final Licence shall be fifty (50) years from the date fixed in accordance with Section 3.6 of this Interim Licence for the completion of the initial development and shall be subject to renewal or extension in accordance with the provisions of *The Water Power Act* and the Water Power Regulation."

The date of the Initial Development was established by Manitoba Conservation and Water Stewardship (MCWS) as June 22, 2012, the date when the first turbine (Unit No 1) was released for commercial service. Therefore, both the Interim Licence and the Regulation provide for a Final Licence which would expire no later than June 22, 2062. In accordance with section 46 of the Regulation, a 50-year term Final Licence would require the WPLP to apply for licence renewal between the years 2056 and 2058. At that time, the project would be reviewed according to government established processes of the time and a decision made on whether a Renewal Licence would be issued.

In accordance with Section 44 of the Regulation, the Final Licence shall embody the terms of the Interim Licence and any other terms and conditions, that the Minister may impose. The Minister may impose any term or condition at any time.

Wuskwatim Monitoring

An Environmental Protection Program was developed for the Wuskwatim GS that describes a commitment to a series of monitoring and management measures to deal with potential project effects. Monitoring includes the aquatic and terrestrial environment, heritage and archaeological, economic, and social impacts on residents and communities.

In addition to being part of Manitoba Hydro's commitment to environmental stewardship, monitoring activities are consistent with the licensing and regulatory approvals requirements, and the requirements set out in the Wuskwatim PDA. Monitoring is an *Environment Act* licence condition and a *Fisheries Act* authorization requirement.

Monitoring is conducted for the following purposes:

- To provide baseline information to evaluate long-term changes or trends and facilitate effects assessment;
- To confirm compliance with regulatory requirements, including approval terms and conditions;
- To verify the accuracy and confirm the nature and magnitude of predicted environmental effects;
- To assess the effectiveness of mitigation measures implemented;
- To identify unexpected environmental effects of the Project, if they occur; and
- To identify adaptive management mitigation measures to address unanticipated environmental effects, where required.

More than three years of monitoring data was used to develop the environmental assessment for the Wuskwatim project. Monitoring was conducted on all phases of the construction, with mechanisms in place to deal with any areas of non-compliance and communicate effectively within the project team and with regulators. Monitoring for operational impacts is ongoing and continues to include the aquatic and terrestrial environment, heritage and archaeological, economic, and social impacts on residents and communities. Annual reporting on monitoring activities occurs on January 31 and June 21 for the *Fisheries Act* Authorization and the *Environment Act* Licence, respectively. WPLP publishes annual Year in Review (formerly Monitoring Overview) reports on the Wuskwatim web site (www.wuskwatim.ca/reports.html).

Coordinated Aquatic Monitoring Program

The Coordinated Aquatic Monitoring Program (CAMP) is managed through a partnership between Manitoba Hydro and the Province of Manitoba. This long-term program studies and monitors the health of water bodies affected by Manitoba Hydro's generating system. The geographic scale of CAMP makes it the largest holistic ecosystem-based aquatic monitoring program in Manitoba. The purpose of CAMP is to strengthen the understanding of the effects of hydroelectric activity on the aquatic ecosystem and support more informed decision making when it comes to water management.

Although CAMP monitoring is not done directly on water bodies affected by the Wuskwatim GS, Wuskwatim and CAMP data are used to provide context for each program as well as influence future monitoring needs. More information about CAMP can be found on the web site (www.campmb.com).

Wuskwatim Reporting

The Interim *Water Power Act* Licence and *The Environment Act* Licence No. 2699 specify operational constraints in the operation of Wuskwatim GS. These licences constrain the water level on Wuskwatim Lake within a specific range, and limit the rate of change in water level on Birch Tree Lake. *The Environment Act* Licence requires regular monthly reporting of Wuskwatim hourly Water Level, Wuskwatim Mean Daily Water Level (with wind and wave effects eliminated) and the Birch Tree Lake Daily Change in Water Level. In accordance with this requirement notification of the monthly range and daily change in water levels is provided to MSD each month of the year. In addition to the monthly reporting requirement, the *Environment Act* Licence also requires an annual water level report for each calendar year. This report addresses all water level constraints imposed by both *The Water Power Act* and *Environment Act* licences. The report also contains information on data collection, validation, and reporting, as well as a summary of licence limit exceedances during the year. WPLP publishes the Monthly and Annual Water Level reports on the Wuskwatim web site (www.wuskwatim.ca/reports.html).

Division 2 – Observance of Licence Conditions

This division of the report provides supporting information on a term by term basis that demonstrates the fulfillment of the requirements of the Interim Licence.

PART 1.0 DEFINITIONS

This section is a list of definitions requiring no evaluation of observance.

PART 2.0 GRANT OF WATER RIGHTS

2.1 Rights Granted

Licence Term

Subject to sections 2.2 and 2.3 of this Interim Licence, the Minister grants to the Licensee:

(a) the right to divert, store, and use waters of the Burntwood River at and near the Wuskwatim site;

(b) the right to develop electric power and energy from the waters of the Burntwood River at and near the Wuskwatim site;

(c) the right to generate, transmit, distribute, sell and deliver electric power and energy developed from the Wuskwatim site and for that purpose to use and occupy the lands of the Province described in Section 5.1 of this Interim Licence; and

(d) the right to construct, operate and maintain the works associated with the Undertaking described in Section 2.2 of this Interim Licence, the location and description of which are shown upon the record plans numbered and filed with the Department in Winnipeg, except as the said Undertaking may be modified or extended with the prior approval of the Minister.

Observance

The Wuskwatim Power Limited Partnership (WPLP) has and continues to exercise its rights granted under this section of the licence.

2.2 Description of Works

Licence Term

The works associated with the Undertaking are described as the works at or near the Wuskwatim site consisting of:

- *a reinforced concrete powerhouse and intake structure,*
- *a reinforced concrete spillway*,
- a non overflow dam separating these two structures,
- a main earth dam extending south-westerly from the powerhouse,

• an earth fill dyke extending from the north end of the spillway to the north bank of the river,

• an engineered area for placement of the excavated materials extending from the north dyke in an upstream direction parallel to the north bank of the Burntwood River,

• a channel excavation upstream of the generating station on the north bank of the Burntwood River adjacent to Wuskwatim Falls, and

• transmission lines and all necessary machinery and equipment for the development, generation, transformation and transmission of electric power and energy for industrial and general purposes.

Observance

The WPLP has constructed the Undertaking as described.

2.3 Adherence to Construction Plans

Licence Term

The construction of the Undertaking shall be conducted in accordance with the plans filed and set out in Appendix 1 of this Interim Licence.

Observance

The WPLP has constructed the Undertaking as set out in Appendix 1 of the Interim Licence and as described by plans listed in Appendix D, page 97.

2.4 Compliance with Licence, Regulation and Law

Licence Term

The Licensee shall comply with:

- (a) all conditions of this Interim Licence;
- (b) all applicable provisions of The Water Power Act and the Water Power Regulation; and
- (c) all applicable federal and provincial laws.

Observance

The WPLP has and continues to adhere to: all conditions of the Interim Licence as presented in this division; all applicable provision of the Regulation as detailed in Division 3; all applicable federal and provincial laws as per Interim Licence term 10.5.

PART 3.0 CONSTRUCTION

3.1 Construction Plans

Licence Term

The Licensee shall file the preliminary works construction plans for the Undertaking with the Department in such form and detail as is required by the Water Power Regulation within three (3) months from the date of this Interim Licence. The Licensee shall include with the preliminary works construction plans a schedule outlining a time frame for the submission of the permanent works construction plans for the Undertaking.

Observance

The preliminary works construction plans were filed with Manitoba Water Stewardship (MWS) on October 13, 2005. MWS approval of these plans and conditional authorization to begin construction was obtained on June 05, 2006. The permanent works construction plans were submitted on December 23, 2008. These were accepted as fulfilment under Sections 21 to 23 of the Regulation by a letter dated January 8, 2009. Copies of these letters as well as the preliminary works construction plans, can be found in Appendix A, pages 38, 47, 48, and 73.

3.2 Construction Period

Licence Term

After the preliminary works construction plans for the Undertaking have been approved, the Licensee shall begin the construction of the works associated with the Undertaking within the time limit provided in the Water Power Regulation, and shall thereafter without interruption, except such as may be occasioned by act of God or other major cause beyond the control of the Licensee (other than want of funds), carry on and complete the construction of the Undertaking according to the approved plans or as the plans may be amended or modified at the direction of the Minister or with prior approval of the Minister during the progress of construction, and subject to the terms of this Interim Licence and the Water Power Regulation.

Observance

Manitoba Water Stewardship approved the preliminary works construction plans and authorized the start of construction in a June 5, 2006 letter. Construction of the project commenced on July 10, 2006, being within six months of the approval, as stipulated by Section 26(2) and 25(1) of the Regulation. The work continued until the project was completed.

A copy of the June 5, 2006 letter can be found in Appendix A on page 47.

3.3 Initial Development

Licence Term

Upon or before September 1, 2012, the licensee shall have installed all the machinery and equipment required for an initial development of one (1) unit with a nominal capacity of 70,000 kilowatts as measured on the turbine shaft and shall be in a position to apply the electric power and energy to beneficial use.

Observance

On July 16, 2012 the WPLP notified Manitoba Conservation and Water Stewardship (MCWS) that the first unit (Unit #1) was released for commercial service on June 22, 2012 and it was able to apply the power to beneficial use. The nameplate capacity is 69,700 kilowatts at a head of 21.05 metres.

A November 22, 2012 letter from MCWS established June 22, 2012 as the date for completion of the initial development.

A copy of the July 16, 2012 and November 22, 2012 documents can be found in Appendix A, on pages 74 and 76.

3.4 Completion of Undertaking

Licence Term

Upon or before March 31, 2013 the Licensee shall have installed an additional two (2) units and shall have satisfactorily completed the Undertaking consisting of three (3) units. The three (3) units shall have a nominal capacity of 210,000 kilowatts as measured on the turbine shaft.

Observance

The remaining two units were released for commercial service on August 22, 2012 (Unit #3) and October 6, 2012 (Unit #2). A November 22, 2012 letter from MCWS confirmed satisfaction of Sections 3.4 and 3.5 of the Interim Licence. The nameplate capacity is 209,100 kilowatts at a head of 21.05 metres.

A copy of the November 22, 2012 letter can be found in Appendix A, on page 76.

3.5 Notification of Completion

Licence Term

The Licensee shall notify the Department in writing of the commissioning date of each unit within 30 days of commissioning, and when the initial development is completed and also when each unit is placed into commercial service.

Observance

The WPLP notified MCWS of the completion and commissioning of each unit as shown on Table 1. Notification of the completion of the initial development was coincident with the commissioning of Unit #1. Copies of the notification letters for each of the three units can be found in Appendix A on pages 74, 78, and 79.

Unit	Date of Completion	Date of Notification	Days from Commission to Notification
1	June 22, 2012	July 16, 2012	24
3	August 22, 2012	August 28, 2012	6
2	October 6, 2012	October 17, 2012	11

Table 1 Completion of unit notification dates

3.6 Criteria for Determining Completion Date

The date of the completion of the initial development shall be determined in accordance with Section 42(4) of the Water Power Regulation, being the earlier of:

- a) the date on which the turbine generator unit comprising the initial development has been commissioned and placed into commercial service; and
- b) the date set out in Section 3.3 of this Interim Licence, whether or not the Licensee has completed those things required by Section 3.3 of this Interim Licence.

Observance

This section requires no statement of observance on the part of the licensee.

3.7 Surveys

Licence Term

The Licensee shall from time to time in accordance with Section 24 of the Water Power Regulation cause surveys to be made and plans prepared by a Manitoba Land Surveyor for

deposit in the land titles office of all other lands required for the purpose of the Undertaking as distinct from those purposes described in Section 5.1 of this Interim Licence.

Observance

Surveys and plans necessary to define the project area have been deposited in the land titles office. All lands required for the project are legally definable.

PART 4.0 REGULATION AND CONTROL OF WATERS

4.1 Licence Execution

Licence Term

The Licensee may divert, use and store continuously for the development of electric power and energy at the Wuskwatim site all the waters of the Burntwood River which may be flowing at the site from time to time during the term of this Interim Licence, subject to the conditions of all water power licences set out in Section 72 of the Water Power Regulation and, accordingly, the Licensee shall:

- a) Divert, use or store the water authorized to be diverted, used or stored by the Licensee in such a manner as not to interfere, in the opinion of the Minister, with the maximum advantageous development of the electric power and energy and other resources of the river or stream upon which the works are located;
- b) Conform to and comply with any orders in respect of the control or regulation of the flow of the waters of such river or stream as may be made from time to time by the Minister or any person authorized by the Minister in that behalf, and
- c) At no time cause or permit the surface level of the waters of such river or stream or of any storage reservoir operated by the Licensee to be raised or lowered beyond the limits which shall be fixed from time to time by the Minister or by a person authorized by the Minister in that behalf.

Observance

The observance of this licence section is articulated in Division 3, Section 72, on page 29 of this report.

4.2 Maximum Forebay Level

Licence Term

The Licensee shall not raise the headwater of its development above an elevation of 234.0 metres ASL as measured on Wuskwatim Lake, except as ordered by the Minister under Clause 72(b) of the Water Power Regulation or as fixed by the Minister under Clause 72(c) of the Water Power Regulation.

Observance

The criteria for observing the maximum headwater of the development has been defined by a document known as the Wuskwatim GS Licence Implementation Guide for Water Levels as required by Section 10.2 of the Interim Licence. The guide shows the location of water level

monitoring stations, outlines the methodologies used to determine wind and wave effects, and describes reporting procedures to be followed.

The criteria specify that the Wuskwatim Mean Daily Water Level defined as a three-day moving mean (with wind and wave effect eliminated), does not exceed 234.0 metres (approximately 767.7 feet). On an hourly basis, water levels are not to exceed 234.1 metres (approximately 768 feet) more than two times for two consecutive hours each time in any 24 hour period.

Annual water level reporting has occurred since September 1, 2012 which marked the completion of channel improvements between Wuskwatim Lake and the Wuskwatim GS, and the achievement of Wuskwatim Lake level control.

During the operating phase from September 1, 2012 to December 31, 2015, Wuskwatim Mean Daily Water Level was below 234.0 metres 99% of the time. The Wuskwatim Hourly Water Levels were within the maximum licence limit 100% of the time.

See Appendix B on page 89 for an explanation of the reportable events.

4.3 Minimum Forebay Level

Licence Term

The Licensee shall not lower the headwater of its development below an elevation of 233.0 metres ASL as measured on Wuskwatim Lake, except as ordered by the Minister under Clause 72(b) of the Water Power Regulation or as fixed by the Minister under Clause 72(c) of the Water Power Regulation.

Observance

The criteria for observing minimum headwater has been defined by the Wuskwatim GS Licence Implementation Guide for Water Levels. During the operating phase from September 1, 2012 to December 31, 2015, the Wuskwatim Mean Daily Water Levels as well as the Wuskwatim Hourly Water Levels were within the minimum licence limit 100% of the time.

PART 5.0 LANDS TO BE USED AND OCCUPIED

5.1 Project Lands

Licence Term

Subject to Section 3.1 of this Interim Licence, the Licensee may enter upon, use and occupy for making surveys and investigations and constructing works as may be deemed necessary for the Undertaking, such lands of the Province as may reasonably be required for the said purposes and which lie within the Severance Line shown on a plan identified as No. 57-2-1060 (Manitoba Hydro No. 1-00184-DE-07311-0034-0001_01).

<u>Observance</u>

Refinement of the severance line showing the lands required for the project as identified in

plan No. 57-2-1060 (Manitoba Hydro No. 1-00184-DE-07311-0034-0001_01) is in progress at the writing of this report. This line is legally definable either by the provincial section grid or legal survey plans and is in the process of being reviewed by MSD. The drawing showing the refined line is shown on plan No. WPL-1-00184-PE-07311-0035-0001_00 (Manitoba Hydro No. 1-00184-PE-07311-0035-0001_00).

5.2 Authorization to Flood

Licence Term

Subject to Section 5.3 of this Interim Licence, the Licensee may flood such lands of the Province as are shown on Plan No. 57-2-1060 (Manitoba Hydro No. 1-00184-DE-07311-0034-0001_00).

Observance

Lands have been flooded approximately as shown on the plans referenced.

5.3 Plans may be Amended

Licence Term

The plan referred to in Sections 5.1 and 5.2 of this Interim Licence may be amended from time to time by the Minister.

Observance

This provision requires no observance statement by the licensee.

5.4 Severance Line, Lands of the Province and Privately Held Lands

Licence Term

In accordance with Section 24 of the Water Power Regulation, the Licensee shall, where directed by the director, cause a survey to be made and a plan prepared by a Manitoba Land Surveyor for deposit in the land titles office, showing in detail the lands required to be occupied for the purposes of the Undertaking that are approved by the Director and shall note separately:

- (a) Lands of the Province not covered by water required for main diverting works, powerhouses and similar works;
- (b) Lands of the Province covered by water required for main diverting works, powerhouses and similar works;
- (c) Lands of the Province required only to be flooded in connection with the storage or pondage of water;
- (d) Lands of the Province required only for rights of way for water conduits, transmission lines and similar works;
- (e) Lands of the Province, if any, required for substations, distributing stations, terminal stations, and similar works; and
- (f) Privately owned lands.

Observance

The severance line drawing filed by the Licensee and made a part of the Interim Licence is as follows:

MCWS File Number	Licensee's File Number	Description
57-2-1060	1-00184-DE-07311-0034- 0001_01	Severance Line and Lands Required for Flooding and Other Purposes, May 5, 2006

Table 2Severance Line drawing list

5.5 Timber Clearing

Licence Term

The Licensee shall to the satisfaction of the Minister, clear and keep clear from timber, brush and other material, all lands which are to be flooded under Section 5.2 of this Interim Licence.

Observance

All lands flooded for Wuskwatim were cleared prior to impoundment consistent with the Environmental Impact Statement and the Generating Station Environmental Protection Plan. This was confirmed by aerial photos and reported in the WPLP 2008-2009 Monitoring Overview Report, page 17. Manitoba Hydro's Waterways Management Program was active in debris clearing in the forebay during construction and continues to be during operation.

PART 6.0 WATER USE AND LAND USE RENTALS

6.1 Water Rentals

Licence Term

From the date of completion of the initial development determined in accordance with Section 3.6 of this Interim Licence, and for the duration of this Interim Licence, the Licensee shall pay as rent for use of water for the development of electric power and energy, an amount determined in accordance with the Water Power Regulation.

Observance

Water rentals have been paid since the completion of the initial development on June 22, 2012. These rentals continue to be paid on a monthly basis and in accordance with conditions set out in section 3.6 of the Interim Licence and section 48(1) of the Water Power Regulation.

6.2 Land Rentals

Licence Term

From the date of completion of the initial development determined in accordance with Section 3.6 of this Interim Licence, and for the duration of this Interim Licence, the Licensee shall pay, subject to Section 6.3 of this Interim Licence, annually, in advance, as rent for the use and occupation of Crown lands of the Province described in section 5.4(a) to (e) of this Interim Licence an amount determined in accordance with the Water Power Regulation.

Observance

Land rental payments are not applicable to the Wuskwatim GS project because the WPLP

owns these lands, as detailed in an April 7, 2014 letter to MCWS which can be found in Appendix C on page 94.

6.3 Rentals during Initial Development

Licence Term

The first payment shall consist of an amount due for the preceding year, which shall be prorated to cover that portion of the year between the date of completion of the initial development and the end of the year together with the amount due in advance for the thencurrent year.

Observance

Payments have been made as required.

PART 7.0 ENTITLEMENT TO A FINAL LICENCE

7.1 Prerequisites for the Entitlement of a Final Licence

Licence Term

In accordance with Section 43(1) of the <u>Water Power Regulation</u>, upon the completion by the Licensee of the initial development in accordance with Section 3.4 of this Interim Licence and upon the fulfillment by it of all the terms and conditions required by this Interim Licence and the <u>Water Power Regulation</u> to be observed and fulfilled by it, the Licensee shall be entitled to a Final Licence for the diversion, storage and use of water, for the development of electric power and energy therefrom, for the utilization of such energy, and for the use and occupation of those lands of the Province which, in the Minister's opinion, are required for the proper operation and maintenance of the Undertaking.

Observance

This document was prepared to assist the Minister in determining if the WPLP has fulfilled all obligations required to obtain a Final Licence under *The Water Power Act*.

The WPLP requested a Final Licence on June 3, 2015. A copy of the Final Licence request is shown in Appendix E on page 99.

7.2 Final Licence Terms

Licence Term

The Final Licence will, subject to The Water Power Act and the Water Power Regulation, include such conditions as the Minister may determine in accordance with the Water Power Regulation, including the following conditions and particulars:

- (a) The Licensee may divert, store and use continuously for the development of electric power and energy at the Wuskwatim site all the waters of the Burntwood River, which may be flowing at that site from time to time during the term of this Final Licence, subject, however, to Section 72 of the Water Power Regulation.
- (b) The Licensee shall not raise the headwater of its development above an elevation of 234.0 metres ASL as measured on Wuskwatim Lake, except as ordered by the Minister

under Clause 72(b) of the Water Power Regulation or as fixed by the Minister under Clause 72(c) of the Water Power Regulation.

- (c) The Licensee shall not lower the headwater of its development below an elevation of 233.0 metres ASL as measured on Wuskwatim Lake, except as ordered by the Minister under Clause 72(b) of the Water Power Regulation or as fixed by the Minister under Section 72(c) of the Water Power Regulation.
- (d) The Licensee shall also pay a rental during the term of the Final Licence for the use of water for the development of electric power and energy, determined in accordance with Section 48 of the Water Power Regulation and payable at the times and in the manner therein provided.
- (e) The Licensee shall, during the term of the Final Licence pay annually in advance a rental that is determined in accordance with Section 48 of the Water Power Regulation for the use of those lands of the Province to be described in the Final Licence, and situated within the Severance Line and used for the purposes described in Section 5.4 of this Interim Licence.
- (f) In accordance with Section 45 of the Water Power Regulation, the term of the Final Licence shall be fifty (50) years from the date fixed in accordance with Section 3.6 of this Interim Licence for the completion of the initial development and shall be subject to renewal or extension in accordance with the provisions of The Water Power Act and the Water Power Regulation.
- (g) *The Licensee shall, to the satisfaction of the Minister, clear and keep clear from timber, brush and other material, all lands which are flooded.*
- (h) The Undertaking in respect of which the Final Licence is to be issued is to comprise:
 - A reinforced concrete powerhouse and intake structure, with three vertical shaft hydroelectric turbines, each with 70,000 kilowatts capacity;
 - A reinforced concrete spillway,
 - A non overflow dam separating these two structures,
 - A main earth dam extending south-westerly from the powerhouse,
 - An earth fill dyke extending from the north end of the spillway to the north bank of the river,
 - An engineered area for placement of the excavated materials extending from the north dyke in an upstream direction parallel to the north bank of the Burntwood River,
 - A channel excavation upstream of the generating station on the north bank of the Burntwood River adjacent to Wuskwatim Falls, and
 - Transmission lines and all necessary machinery and equipment for the development, generation, transformation and transmission of electric power and energy for industrial and general purposes.
- *(i) The Severance Line as agreed upon, in accordance with clause 44(g) of the Water Power Regulation.*

Observance

This provision requires no observance statement by the licensee.

PART 8.0 CANCELLATION

8.1 Failure to comply with Terms and Conditions of the Interim Licence or Regulation Licence Term

In accordance with Subsections 41(2) and 41(3) of the Water Power Regulation, if the Licensee fails to comply with any term or condition of this Interim Licence or the Regulation, the Minister may cancel this Interim Licence or take such other action or make such other order as he shall deem suitable.

Observance

The WPLP has complied with all terms and conditions of the Interim Licence and with the Regulation as demonstrated in this report.

PART 9.0 ANNUAL DEPOSIT AND GUARANTEE DEPOSIT

9.1 Annual Deposit and establishment of the construction guarantee fund

Licence Term

In accordance with Section 27 of the Water Power Regulation, the Licensee shall each year make an annual deposit with the Director an amount for the period commencing with the date of this Interim Licence and extending to the date of the establishment of the construction guarantee fund required by Section 28 of the Water Power Regulation.

Observance

The WPLP submitted the construction guarantee fund through a single deposit of an irrevocable standby letter of credit (no. P354259W00367) dated August 3, 2006 for an amount of \$50,000 to Manitoba Water Stewardship. A copy of the letter of credit is shown in Appendix F on page 106.

9.2 Guarantee deposit

Licence Term

In accordance with Section 28 of the Water Power Regulation, the Licensee shall deposit with the Director a guarantee deposit as security for the performance of the terms and conditions of this Interim Licence.

Observance

The WPLP submitted an irrevocable standby letter of credit (no. P354259W00367) dated August 3, 2006 for an amount of \$50,000 to MWS. A copy of the letter of credit is shown in Appendix F on page 106.

PART 10.0 GENERAL PROVISIONS

10.1 Wind and Wave Effects Eliminated Water Levels

Licence Term

All water levels referred to in this Interim Licence shall be based on mean daily water levels with wind and wave effects eliminated.

Observance

The observance of water levels in Part 4 of this Interim Licence is based on Mean Daily Water Levels with wind effects eliminated, as described in the Wuskwatim GS Licence Implementation Guide.

10.2 Licence Implementation Guide for Water Levels

Licence Term

The Licensee shall prepare a report, within one year from the date of this Interim Licence, satisfactory to the Director, that shows the location of water level monitoring stations, outlines the methodologies used to determine wind and wave effects and describes reporting procedures to be followed.

Observance

The Wuskwatim GS Licence Implementation Guide for Water levels was submitted to MWS for approval on July 18, 2007.

Copies of the July 18, 2007 letter of submission and November 6, 2013 letter of acceptance by MCWS can be found in Appendix A, on pages 81 and 82.

10.3 **Datum**

Licence Term

All elevations referred to in this Interim Licence are based on the Geodetic Survey of Canada (GS of C), Canadian Government Vertical Datum (CGVD) 1928, 1971 Local Adjustment, which is also known as GS of CCGVD28, 1969 Local Adjustment.

Observance

All elevations related to the Wuskwatim GS are based on this datum.

10.4 Water Level and Flow Compliance

Licence Term

As provided for in Section 65 of the Water Power Regulation, the Licensee shall submit all information and data on water levels and flows necessary to enable the Director to determine compliance with this Interim Licence and other approvals pertaining to water levels and flows in connection with the operation of the Undertaking.

Observance

Water level data are summarized in Water Level Reports and submitted annually to MSD for review in accordance with Section 65 of the Water Power Regulation. To date four reports have been submitted for the years 2012 to 2015. The 2012 report covered a period of

September 1 to December 31 corresponding to the completion of channel improvements required for final Wuskwatim Lake water level control. Subsequent annual reports covered the entire calendar year.

10.5 Regulatory Compliance

Licence Term

The Licensee shall comply fully with all applicable federal and provincial statutes, all rules and regulations made thereunder, and observe and carry out any instructions of the Minister concerning any of those matters not inconsistent with the above-mentioned statutes, rules and regulations.

Observance

The operation of Wuskwatim GS adheres to all applicable federal and provincial statues and all rules and regulations made thereunder and specifically in accordance to The Environment Act Licence #2699, the Fisheries Act Authorization #MB-01-0595-8, and an approval issued under the former Navigable Waters Protection Act (replaced by the Navigation Protection Act).

10.6 Accessibility to Undertaking

Licence Term

The Licensee shall provide the Minister, the Director, or any engineer or person authorized by either for that purpose, with free access at all times to all parts of the Undertaking for the purpose of determining compliance with this Interim Licence.

Observance

Access is available upon request. Site visits with personnel from MCWS were carried out in 2009 and in 2013 in order to help familiarize MCWS staff with site specific conditions at various stages of project development.

10.7 Plans Associated with the Licence

Licence Term

The plans filed by the Licensee and made a part of this Interim Licence are as listed in Appendix 1.

Observance

This section of the Interim Licence does not require an observance statement.

10.8 Licence subject to the Water Power Regulation

Licence Term

This Interim Licence is subject to the provisions of the Water Power Regulation.

Observance

The WPLP's compliance with the Regulation is covered in Division 3 of this report.

. . . 21

10.9 Licence Subject to Minister's Stipulations

Licence Term

This Interim Licence is subject to such other conditions as the Minister may impose in writing from time to time.

Observance

The Minister has not imposed any conditions in addition to those of the Interim Licence.

10.10 Water Power Act References

Licence Term

Any reference in this Interim Licence to "The Water Power Act" means The Water Power Act (C.C.S.M. c. W60) and includes any amendment or replacement of that Act.

Observance

This section of the Interim Licence does not require an observance statement.

10.11 Water Power Regulation References

Licence Term

Any reference in this Interim Licence to the "Water Power Regulation" means the Water Power Regulation (M.R. 25/88R) and includes any amendments or replacement of that Regulation and any other regulations now or hereinafter in force governing the granting or administering of provincial water powers or the lands required in connection with the development and use of provincial water powers in effect from time to time.

Observance

This section of the Interim Licence does not require an observance statement.

Division 3 - Observance of Pertinent Water Power Act Regulation Articles

This division of the report provides supporting information for selected articles of the Regulation that demonstrates the fulfillment of the requirements of the Regulation. Manitoba Sustainable Development (MSD) has agreed to the selection of those articles of the Regulation that are pertinent to this Interim Licence. However not all pertinent articles are covered in this division if already covered in Division 2. Each article is shown in italics followed by a statement how the licensee has fulfilled its obligations.

The application

4 All elevations given in connection with the plans or other information filed by the applicant should be referred, if possible, to mean sea level datum.

Observance

Elevations shown on plans are based on Geodetic Survey of Canada (GS of C) datum, which use mean sea level as a reference.

Final construction plans

35(1) Within 90 days after the completion of the initial development in accordance with the general construction plans or with any authorized changes therein, and within 90 days after the completion of any additional unit of the power development or of the power system, the interim or final licensee, as the case may be, shall file with the director copies of the final construction plans.

35(2) The final construction plans, together with drawings and specifications accompanying them, shall show the works as actually constructed in such detail as would be required to be given to construction contractors for the purpose of constructing the works and shall show the precise areas of lands occupied so as to satisfy the requirements of section 24.

35(3) The said plans shall be on tracing film, and shall conform to the sizes specified in clause 3(l); the said specification shall be either printed or typed, and both plans and specifications shall be signed by a professional engineer of recognized standing in Canada satisfactory to the director, and shall in other respects satisfy the requirements of the director.

35(4) In no case shall the interim licensee be entitled to the issue of a final licence until the requirements of this section have been complied with insofar as they relate to the initial development.

Observance of subsections 35 (1) to 35 (4)

WPLP has submitted all requisite plans under this section. Final construction plans representing the as-built drawings of Wuskwatim GS were submitted in modern media on December 28, 2012 as per authorization received from MCWS on September 24, 2012. This permitted a single submission to MCWS within 90 days after the commissioning of the final unit on October 6,

2012. Plans were re-submitted on January 15, 2014 to correct the fact that most of the plans submitted in December did not contain a seal by a Professional Engineer.

Copies of the September 24, 2012, December 28, 2012, and January 15, 2014 letters of transmittal can be found in Appendix A, pages 83, 84, and 86. A detailed list of these plans can be found in Appendix D, page 97.

Fixation of construction costs

36(1) Upon completion of the initial development and upon the completion of any substantial addition thereto, a sum shall be fixed which shall represent the actual cost of such development or of such addition, or both, and in the event that the minister and the interim or final licensee, as the case may be, cannot agree upon the sum within 90 days after the completion of the development or of additions, or both, or within 90 days after the purchase of any lands or rights of way within the severance line, the minister shall refer the matter to the court for determination.

36(2) In no case shall a final licence be issued to the interim licensee until such licensee has fully complied with the provisions of this section insofar as they relate to the completion of the initial development.

Observance of subsections 36 (1) and 36 (2)

WPLP submitted the capital cost of the project (\$1,448.6 million) with the submission of final construction plans on December 28, 2012. This was done in accordance with MCWS authorization dated September 24, 2012 permitting the submission within 90 days after the commissioning of the final unit (October 6, 2012).

Copies of the September 24, 2012, and December 28, 2012 letters of transmittal can be found in Appendix A, pages 83 and 84.

Operation under Interim Licence

37(1) In the event that the works are put into operation before the issuance of the final licence, the interim licensee shall, pending the issuance of such final licence and until otherwise agreed upon, maintain and operate the same to the satisfaction of the director and shall at no time raise the level of the waters of any river, lake or other body of water or permit such level to be raised higher than the elevation which shall be fixed from time to time by the director and shall abide by all reasonable regulations which may from time to time be promulgated by the minister for the control of the flow of any waters for general conservation purposes.

Observance

The Wuskwatim GS is operated in accordance with section 4 of the Interim Licence. Observation of the maximum and minimum water level constraints has been addressed in Division 2, Conditions 4.2 and 4.3, page 13 of this report.

37(2) The interim licensee shall in such case pay for any water used in the development of power prior to the issuance of the said final licence, such sum or such rate per horsepower as the minister may determine.

Observance

Observation of water rentals was addressed in Division 2, Condition 6.1, page 16, of this report.

38 In addition to any obligations specially imposed upon interim licensees in this part of this regulation, every interim licensee shall, insofar as his or her position with respect to the use and occupancy of lands and waters of the province, or the maintenance and operation of his or her works or the carrying on of his or her undertaking for the time being is similar to that of a final licensee, and subject to section 37, observe and comply with all the provisions of this regulation applicable to final licensees.

Observance

The WPLP has observed and complied with all the provisions of this regulation as would be applicable to final licensees.

Completion of Initial Development by Interim Licensee

42(4) Upon compliance on the part of the licensee with subsections (1) to (3), the director shall determine a date which, for the purposes of this regulation, shall be the date of completion of the initial development.

Observance

MCWS established June 22, 2012 as the date of the completion of the initial development for the purpose of water power licensing for the Wuskwatim GS in a November 22, 2012 letter to the WPLP. A copy of this letter can be found in Appendix A, page 76.

Issuance of final licence

43(1) Upon the completion of the initial development according to the plans previously approved, and upon fulfillment and compliance otherwise with all the terms and conditions of his or her interim licence and of this regulation, the interim licensee shall be entitled to a final licence authorizing one or more of diversion, use, or storage of water at the site in question, for the development of energy therefrom, for the utilization of such energy, for the occupation or use of the lands of the province or whichever one or more of these is, in the minister's opinion, required for the proper maintenance and operation of the works.

Observance

5022649 Manitoba Ltd. as general partner of the WPLP has taken the necessary steps to fulfill all the terms and conditions required to obtain the final licence as detailed in divisions two (2) and three (3) of this document.

Water use rental statement

48(3.4) A licensee shall, on or before March 1 following each rental period, submit all data required by the director for the determination of the annual water use rental for the rental period. On receipt of the required data, the director shall without delay prepare and provide to the licensee a statement of the water use rent payable by the licensee for the rental period.

Observance

The Deputy Minister of Natural Resources notified Manitoba Hydro on February 29, 1996 of a change in billing practice from an annual to a monthly basis beginning in April 1996. Therefore, all data required for the determination of water rentals for the Wuskwatim GS, has been submitted on a monthly basis.

A copy of the February 29, 1996 letter can be found in Appendix C, on page 95.

Time of payment of rentals

48(3.5) *The rent for each rental period is payable*

- (a) in the case of land use rental, on January 2 of the rental period; and
- (b) in the case of water use rental, within 60 days after receipt of the director's rental statement for the year for the rental period.

M.R. 168/95

Observance

Requisite payments have been provided as follows:

(a) Land use rentals were not required to be paid.

(b) Water use rentals within 60 days of the director's rental statement.

48(11) Every licensee generating electrical energy, unless excused by the director in writing from compliance with this subsection, shall install an approved curve drawing recording wattmeter and shall preserve and produce for inspection all records made by such wattmeter.

Observance

The Wuskwatim GS is equipped with meters which continuously measure power at each generator. The meters transmit the power readings to the control room where they are recorded electronically in the station operating records. These records are available to the province.

51(5) Lands flooded or to be flooded in connection with any undertaking shall not be fenced or otherwise enclosed unless and until the minister's consent in writing has been obtained.

Observance

Flooded lands have not been fenced or enclosed.

Care of lands

54(1) The interim or final licensee shall at all times maintain the lands, works and property held or used by the licensee in respect of his or her licence in a manner satisfactory to the minister, including the maintenance of all flooded or other areas in a sanitary condition and the improvement of the lands from the point of view of landscape architecture, and shall do all in his or her power to protect the lands and the interest of the Crown therein against injury by anyone engaged on or about the works, or by any other person.

Observance

The WPLP implements Manitoba Hydro's Public Water Safety Around Dams Program to ensure safety of staff and the public at Wuskwatim GS. Some of the key features at Wuskwatim include: a private access road with gate and rock barrier; fencing around the powerhouse and spillway; site specific signage; and a spillway safety boom.

54(2) Every interim or final licensee shall do everything reasonable within his or her power, both independently and on request of the minister to prevent and suppress fires on or near the lands to be occupied under the licence.

Observance

The WPLP maintains site lands to reduce the risk of fires and implements Manitoba Hydro's corporate fire prevention and protection program designed to eliminate risks of fire or explosion.

56 Every interim or final licensee shall protect all telephone, telegraph and power transmission lines in existence prior to the construction of his or her own lines where crossed by or in close proximity thereto to the satisfaction of the director or competent provincial authority if any, and shall operate, maintain and render safe to the public his or her own transmission, telephone and other lines to the satisfaction of the director or the said authority if any.

Observance

Canadian Standards Association clearance standards were used in the design of the Wuskwatim GS's transmission system for safety of staff and the public. Public safety is further enhanced through regular maintenance, signage, and public safety education campaigns.

60 Every interim or final licensee shall pay stumpage and royalty for any merchantable timber cut or removed from any forest reserve in the amount as may be fixed by the regulation governing the administration of forest reserves, and for any such timber cut or removed from any lands of the province other than forest reserves, as may be fixed by the regulation governing the granting of yearly licences and permits to cut timber on the lands, but the minister may remit the fees in respect of timber required to be removed from any water power site or lands to be flooded.

<u>Observance</u>

All cleared timber was located on lands owned by the WPLP and therefore stumpage fees were not applicable.

Works, maintenance, and operation

62(1) The licensee shall at all times install and use first class, modern, standard works, plant, and equipment, giving consideration to their requisite suitability of design, safety, strength, durability, efficiency, and all other relevant factors whatsoever, and shall maintain the same in good repair and condition, and shall exercise all due skill and diligence so as to secure satisfactory operation thereof.

Observance

The installed equipment, machinery and structural components at Wuskwatim are technologically modern and designed according to appropriate engineering standards. It is in the partnership's best interest to continuously optimize all components that have a role in producing electricity.

With respect to the forebay containment structures WPLP implements Manitoba Hydro's Dam Safety Program to protect the public, environment, and employees, from the effects of an uncontrolled release of the reservoir behind a dam. The program is based on the Canadian Dam Association (CDA) "Dam Safety Guidelines 2007". Both concrete and embankment dams continue to be inspected at regular intervals for any anomalies or deficiencies. Data from inspections, engineering analysis and instrumentation readings are used to perform a condition assessment of the dams annually. The 2014 annual condition assessment report found the dams at the Wuskwatim GS to be in excellent to good condition.

In addition to annual condition assessment reports, the CDA guidelines require routine Dam Safety Review (DSR) inspections. As the Wuskwatim GS became operational during 2012, there has not been a DSR carried out for the station. A DSR is tentatively planned for Wuskwatim GS in 2019.

An annual report is provided to the province on major construction and maintenance activities.

65(1) The director may require any licensee to install and maintain in good operating condition at such places and in such manner as the director shall approve, accurate meters, measuring weirs, gauges or other approved devices which shall be adequate for determining the amount of water used or power developed in the operation of the works, for determining the flow of the stream or streams from which water is or will be diverted, and for determining the amount of water held in or drawn from storage.

65(2) The licensee shall keep accurate and satisfactory records of the determinations referred to in subsection (1) and shall from time to time make such returns, supported if necessary by statutory declaration, as the director may require.

Observance for subsections 65(1) and 65(2)

Wuskwatim GS is equipped with modern instrumentation necessary to adequately report on water consumption and energy generation. Water level data, unit discharge, spillway discharge, head, and plant output are recorded electronically in the station operating records as a record of hydraulic activity at the station. WPLP maintains records of all gauge readings and can make them available to the province at any time.

Stream regulation and control

72 Every licence shall be deemed to have been executed on the express condition that the licensee shall

(a) divert, use, or store the water authorized to be diverted, used, or stored by him in such a manner as not to interfere, in the opinion of the minister, with the maximum advantageous development of the power and other resources of the river or stream upon which the works are located;

(b) conform to and comply with any orders in respect of the control or regulation of the flow of the waters of such river or stream as may be made from time to time by the minister or any person authorized by the minister in that behalf; and

(c) at no time cause or permit the surface level of the waters of such river or stream or of any storage reservoir operated by the licensee to be raised or lowered beyond the limits which shall be fixed from time to time by the minister or by a person authorized by the minister in that behalf.

Observance for subsections 72(a) to 72(c)

Wuskwatim GS operations are maximized by operating when possible at the most efficient head and wicket gate opening based on periodic field tests. The energy production is integrated into the Manitoba Hydro system such that available stream flow is utilized optimally relative to the overall system requirements by using computer models.

To date, the province has not ordered operations respecting the control or regulation of flow at the Wuskwatim GS.

Division 2 of this report has addressed the observance of the specific terms of the Interim Licence including those pertaining to water level limits.

Accounting

78(1) Every licensee shall keep a true and detailed account of all expenditures made in each calendar year in respect of the works, lands and properties and such other information as follows:

- (a) respecting the works:
 - *(i) the actual cost thereof, giving separately each class of expenditures as indicated in the definition of "actual cost",*
 - *(ii) amounts expended in that year for enlargements and permanent improvements authorized by the minister, and*
 - (iii) depreciation in value from any and all causes for that year;
- (b) respecting lands, tenements and appurtenances not included in clause (a), a statement setting out, in each case, the actual cost thereof in accordance with the provisions of section 36;
- (c) respecting capital stock:
 - (i) the amount authorized and the number of shares into which it is divided,
 - (ii) the number of shares subscribed for and allotted, the number of shares forfeited to

date, and the owners, for the time being, of all outstanding shares,

- (iii) the amount of calls made on each share, and the total amount received from shareholders in cash on account of stock,
- (iv) the number of shares, if any, issued as fully paid up shares as consideration for any service rendered or otherwise, specifying in each case for what consideration such shares were issued, and
- (v) the amounts of dividends declared and paid;
- (d) respecting bonds or debentures:
 - (*i*) the amount authorized, and the period of redemption,
 - (ii) the amount sold (face value) and the rate of interest,
 - (iii) the amount realized from sales,
 - *(iv) the annual amount set aside as sinking fund to meet bonded indebtedness, and date of commencement;*
- (e) the indebtedness other than stock and bonds, specifying the nature and amounts, and the rate of interest such indebtedness is bearing;
- (f) a statement showing the total revenues of the undertaking, specifying the amount received from each and every source;
- (g) the maintenance and operation expenditures, separating those expenditures which are incurred at or near the works from head office and other expenditures relating to general administration;
- (*h*) the names of officers and the classification of employees, with salaries, expenses, or other remuneration paid or allowed;
- (i) the proposed extensions during ensuing years;
- (*j*) *if a company, such annual return shall have attached thereto a copy of the bylaws of the company, showing all amendments thereto during the year covered by that return;*
- (k) such other data as the minister may require.

78(2) Every licensee shall file annually with the director on or before March 1 by a return for the year ending December 31 preceding a detailed summary of all information included under clauses 1(a) and (b).

Observance for subsections 78(1) and 78(2)

WPLP publishes annual Year in Review reports, containing financial summaries, on the Wuskwatim web site (<u>www.wuskwatim.ca/reports.html</u>). The reports are based on a fiscal year ending on March 31st. Detailed information pertaining to clauses 1(a) and (b) of Section 78 is available upon request.

87 Notwithstanding any rights granted or approval given by any licence, every licensee shall comply fully with the provisions of the <u>Navigable Waters Protection Act</u> (Canada) and any rules and regulations promulgated thereunder, and shall also comply fully with the provisions of any provincial statutes or regulations governing the preservation of the purity of waters or governing logging, forestry, fishing, wildlife or other interests present or future which might be affected by any operations conducted under the licence and shall also observe and carry out any instructions of the minister concerning any of those matters not inconsistent with the said statutes and regulations.

Observance

The WPLP is committed to and continues to observe the provisions of the *Navigable Waters Protection Act* and all provincial statutes and regulations.

FIGURES

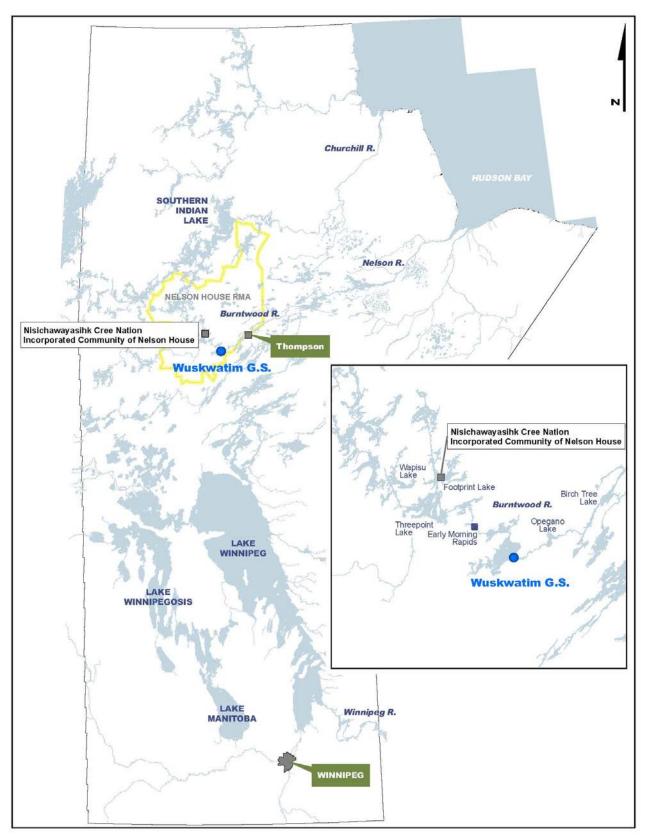


Figure 1 Geographical Location of Wuskwatim GS

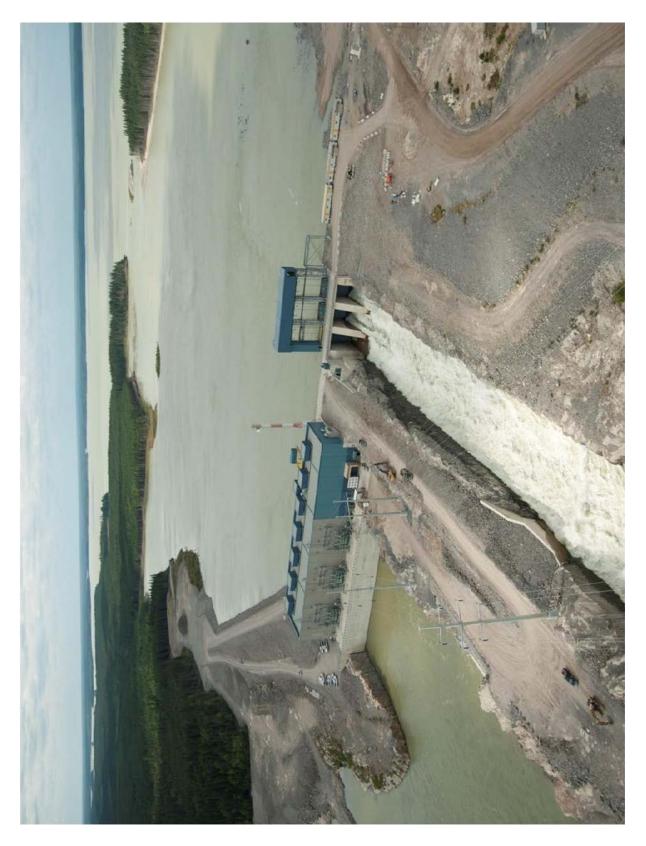


Figure 2 Photograph of Wuskwatim GS

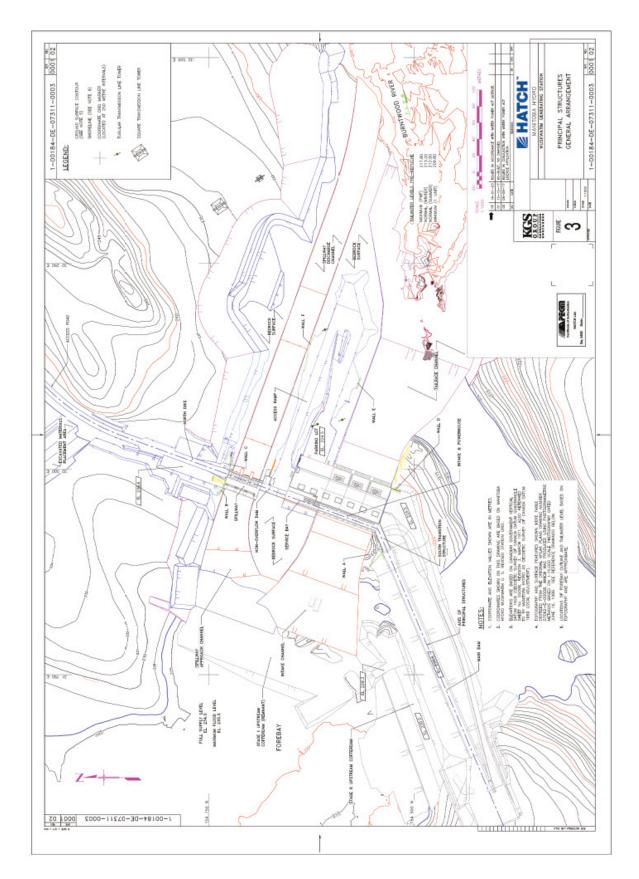


Figure 3 General Arrangement of Wuskwatim GS

Appendix A: Notifications and Determination of Project Completion Documents Including Records of Transmittal

APPENDIX A

Notification and Determination of Project Completion Documents Including Records of Transmittal

The appendix contains a copy of the reference documents that provided notification on unit completion as well as project completion. The following is a list of all relevant documents along with the page number location:

- October 13, 2005, letter indicating submission of preliminary construction plans, page 38.
- June 05, 2006, letter approving preliminary construction plans and authorizing the start of construction, page 47.
- December 23, 2008, letter indicating submission of permanent works construction plans, page 48.
- January 8, 2009, letter approving permanent works construction plans, page 73.
- July 16, 2012, letter indicating completion of unit #1, page 74.
- November 22, 2012, letter in agreement with date establishing date of initial development, page 76.
- August 28, 2012, letter indicating completion of unit #3, page 78.
- October 17, 2012, letter indicating completion of unit #2, page 79.
- July 18, 2007, letter indicating submission of the licence implementation guide, page 81.
- November 6, 2013, letter confirming receipt of Licence Implementation Guide, page 82.
- September 24, 2012, letter authorizing a single submission of final construction plans, page 83.
- December 28, 2012, memorandum indicating completion of unit #3, page 84.
- January 15, 2014, letter of second transmission of drawings, page 86.



P.O. Box 815 • Winnipeg, Manitoba Canada • R3T 2P4 Telephone / N° de téléphone : (204) 474-3557 • Fax / N° de télécopieur : (204) 474-4312 bjosiowy@hydro.mb.ca

2005 10 13

Mr. Steve Topping, P.Eng. Executive Director Infrastructure and Operations Division Manitoba Water Stewardship 200 Saulteaux Crescent Winnipeg, MB R3J 3W3

Dear Steve:

WUSKWATIM PROJECT, INTERIM WATER POWER LICENCE PRELIMINARY WORKS CONSTRUCTION PLANS SUBMISSION

On behalf of the Wuskwatim Power Limited Partnership attached is a submission of the construction plans for the Preliminary Works in accordance with the provisions of the Water Power Act (C.C.S.M.c W60) and Sections 21 to 23 of Regulation M.R. 25/88R in anticipation of receipt of Interim Water Power Licence for the proposed Undertaking.

The permanent works construction plans will be summarized in a general arrangement drawing and will be submitted on or before December 15, 2006.

We would be pleased to discuss the contents of the correspondence at your convenience.

Thank you,

Original signed by, B.J. Osiowy

B.J. Osiowy. P.Eng. Manager Hydro Power Planning Dept. Attach (00184-07310-0127_00)

BJO/rlm

Mr. Steve Topping 2005 10 13 Page 2

xc: K.R.F. Adams E. Wojczynski D. Cormie W.C. Everett

> R.D. Bettner J.R. Kustra

L.T. Moffat

W.J. Muzyczka

M. Moody, Co-Manager, NCN Future Development N. Linklater, Co-Manager, NCN Future Development V. Matthews-Lemieux, NCN K.M. Tennenhouse D. Bedford J. Kidd-Hantscher C. MacInnes

Wuskwatim Project Interim Licence for the Development of Water Power

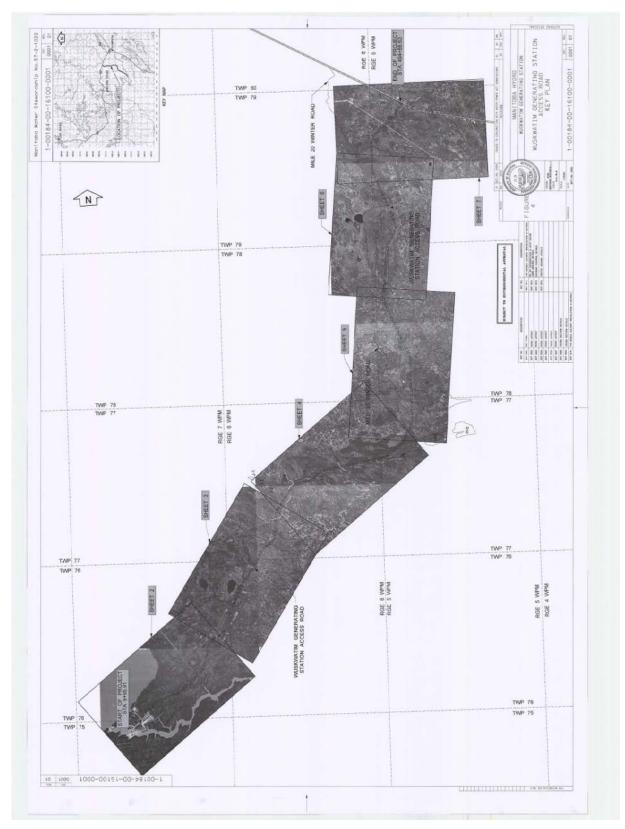
In accordance with The Water Power Act (C.C.S.M., cW60) and The Water Power Regulation (M.R. 25/88R)

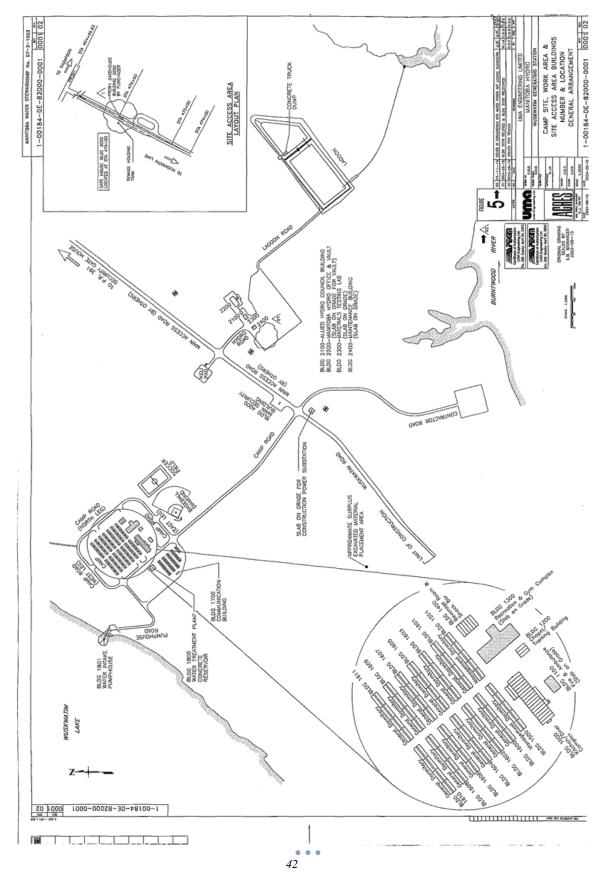
Preliminary Works Construction Plans Submission October, 2005

Department File Number	Licensee File Number	Plan Title
57-2-1022	1-00184-DD-16100-0001-0001_01	Wuskwatim Generating Station Access Road Key Plan
57-2-1023	1-00184-DE-82000-0001-0001_02	Camp Site, Work Area & Site Access Area Buildings Number & Location General Arrangement
57-2-1061	1-00184-DE-10200-0003-0001_00	Transmission & Distribution Concept Facilities Stage 1 ISD May 2006
57-2-1047	1-00184-DE-51000-0001-0001_00	Wuskwatim Construction Power 230 - 12kV Switchyard Structure & Equipment Plan View
57-2-1048	1-00184-PE-50200-0002-0001_00	Thompson - Birchtree Station Concept Layout w/Typical Mitsubishi SVC
57-2-1052	1-00184-PE-10200-0003-0001_00	Transmission Line B76W Plan showing Construction Power TL Route from Thompson-Birchtree Station to Wuskwatim GS

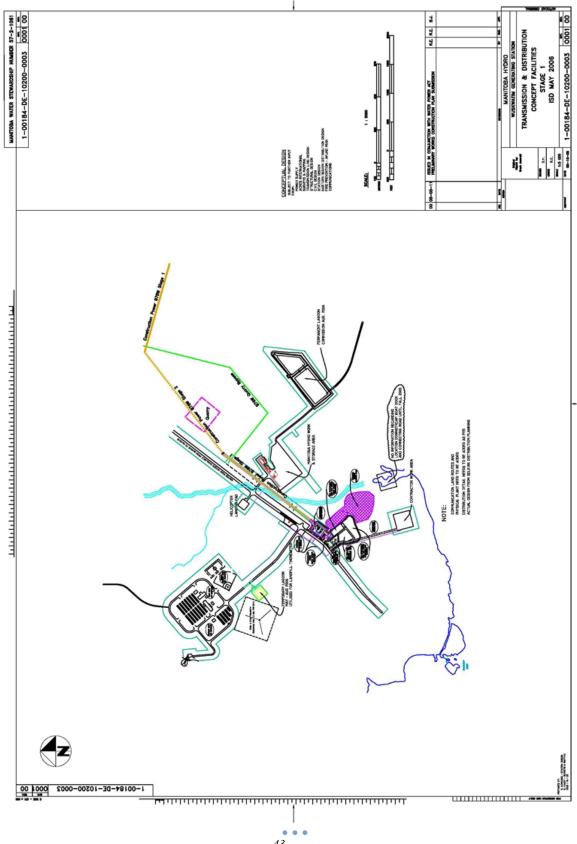
Manitoba Hydro

NCN

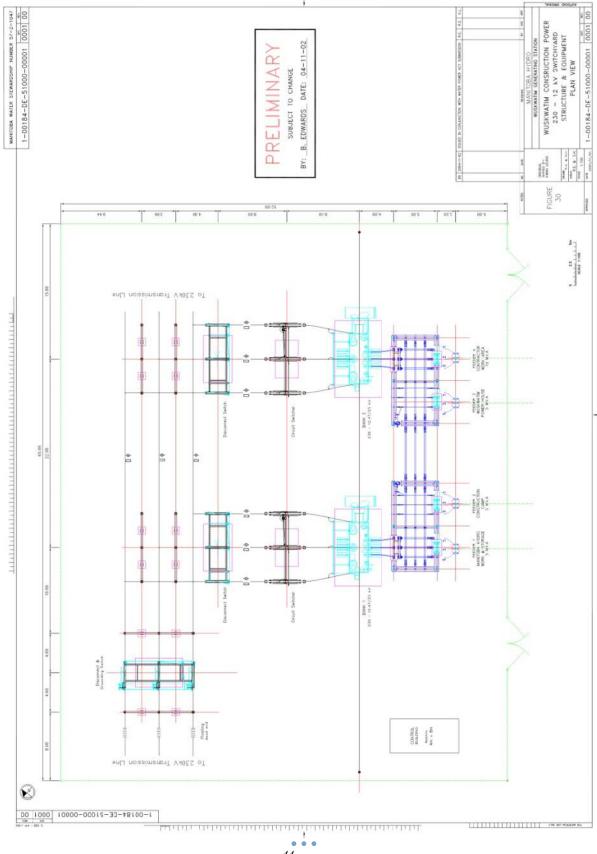




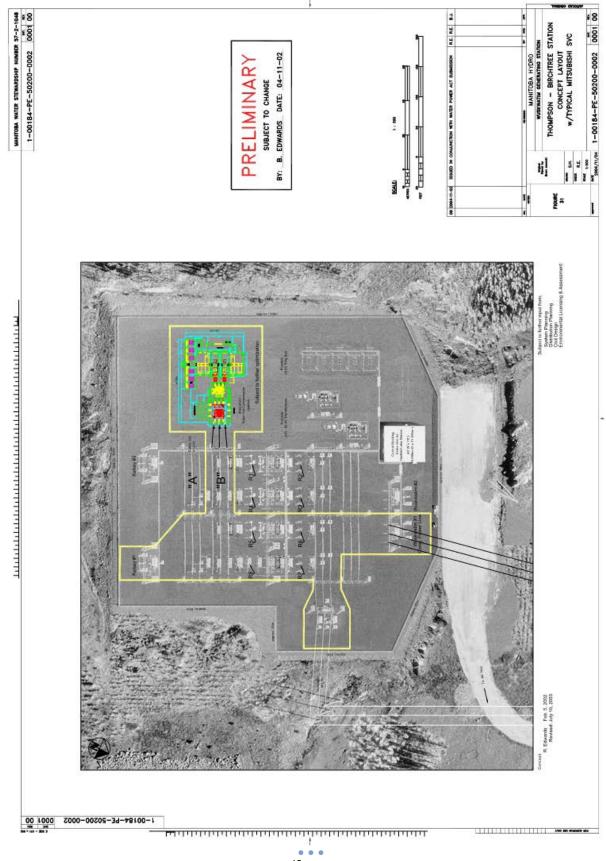
APPENDIX A - continued (October 13, 2005 letter)



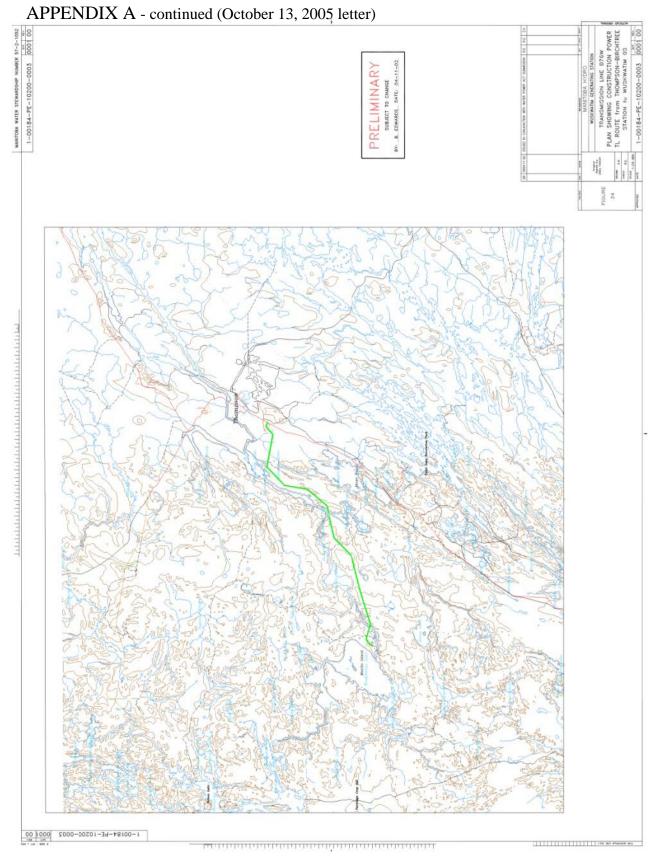
APPENDIX A - continued (October 13, 2005 letter)



APPENDIX A - continued (October 13, 2005 letter)



APPENDIX A - continued (October 13, 2005 letter)





APPENDIX A - continued (June 5, 2006 letter)



Water Stewardship JUN 9 2006 HYDRO POWER PLANNINC DEPARTMENT JURE 5, 2006

File: 53.1.5

B. J. Osiowy, P. Eng. Manager Hydro Power Planning Department Power Planning and Development Division Manitoba Hydro Box 815 WINNIPEG MB R3T 2P4

Dear Mr. Osiowy:

Manitoba

Re: Wuskwatim Generation Project – Preliminary Works Construction Plans

This is in regards to your October 13, 2005 letter together with three (3) sets of preliminary works construction plans that were submitted on behalf of the Wuskwatim Power Limited Partnership in accordance with its application for an Interim licence under The Water Power Act.

The plans describe the preliminary works necessary to begin construction of the proposed Wuskwatim Generation Station and describe in general, the location of the access road, the location of construction campsite facilities, and the details concerning the supply of power for construction purposes. I note that you also intend to submit the perliminary works construction plans by December 15, 2006 which I understand, together with the preliminary works construction plans, would serve to fulfill all of the requirements for general construction plans as noted under Sections 21 to 23 of the Water Power Regulation. As a result, I hereby authorize the Wuskwatim Power Limited Partnership to begin construction of the preliminary works as described in the submitted drawings, subject to ratification by the Nisichawayasihk Cree Nation of the Project Development Agreement and the subsequent issuance of an interim licence to 5022649 Manitoba Ltd. for the develop of water power at the Wuskwatim Site.

Please contact me at (204) 945-7488 if you have any questions.

Yours truly, Original signed by, Steven Topping

Steven D. Topping, P. Eng. Executive Director

c: G. Berezuk



P.O. Box 815 • Winnipeg, Manitoba Canada • R3T 2P4 Telephone / N° de téléphone : (204) 480-5443 • Fax / N° de télécopieur : (204) 480-5455 bjosiowy@hydro.mb.ca

2008 12 23

Mr. Steve Topping, P.Eng. Executive Director Regulatory and Operational Services Division Manitoba Water Stewardship 200 Saulteaux Crescent Winnipeg, MB R3J 3W3

Dear Steve:

WUSKWATIM PROJECT, INTERIM WATER POWER LICENCE PERMANENT WORKS CONSTRUCTION PLANS SUBMISSION

Further to your letter of June 5, 2006 with respect to Manitoba Hydro's submission of the Preliminary Works Construction Plans for the Wuskwatim Project, on behalf of the Wuskwatim Power Limited Partnership attached for your files are three sets (plus one CD with digital copy) of the construction plans of the Permanent Works in accordance with the provisions of the Water Power Act (C.C.S.M.c W60) and Sections 21 to 23 of Regulation M.R. 25/88R.

Construction of the preliminary works has progressed well and all aspects are now complete. The General Civil Contract which was originally tendered in 2007 and re-tendered in 2008, has subsequently been awarded in two separate contracts; the initial excavations and production of concrete aggregates, and the construction of the Permanent Works. The excavations and aggregate contractor (Pennecon Ltd. from Newfoundland) began work in mid-June 2008 and finished up in the fall of 2008. The General Civil Works Contract was awarded in early December to the O'Connell-Neilson-EBC Partnership out of eastern Canada who will construct all of the Permanent Works beginning in the spring 2009 with an in-service date of 2011 for the first unit.

Mr. Steve Topping 2008 12 23 Page 2

We would be pleased to discuss the contents of the correspondence at your convenience. Our main contact person during construction will be Terry Armstrong, P.Eng (474-3132) from the Wuskwatim Engineering Department of the New Generation Construction Division.

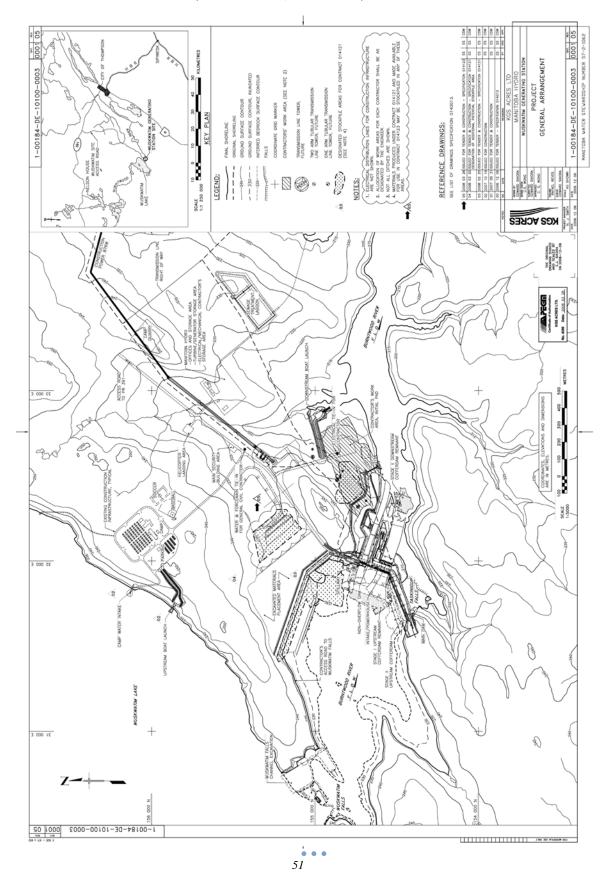
Thank you, Original signed by, B.J. Osiowy

B.J. Osiowy. P.Eng. Manager Hydro Power Planning Dept. Attach (3 sets & CD) (00184-07310-0160_00)

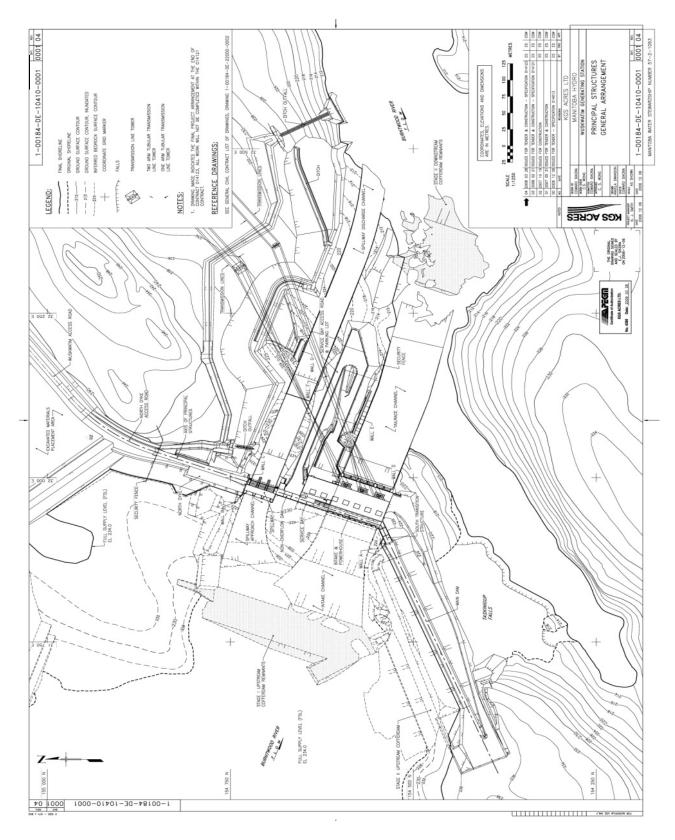
GNC/gnc

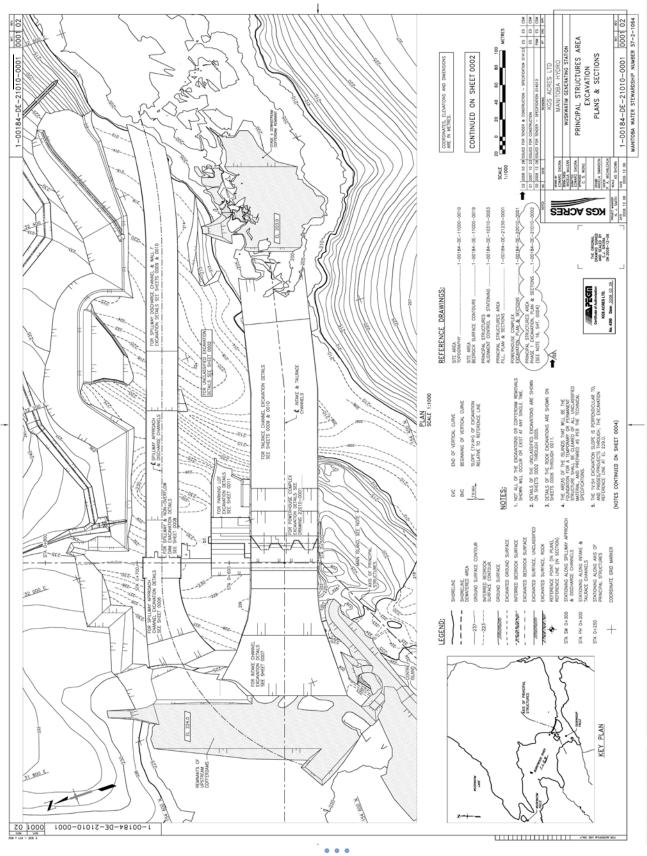
xc: K.R.F. Adams (no attachments) L.T. Moffat (no attachments)
E. Wojczynski (no attachments)
K.M. Tennenhouse (no attachments)
John Markowsky (attention Lorne Robinson, (no attachments))
Ralph Wittebolle (attention Terry Armstrong, attachments)
R.D. Bettner (no attachments)
J. Kidd-Hantscher (no attachments)

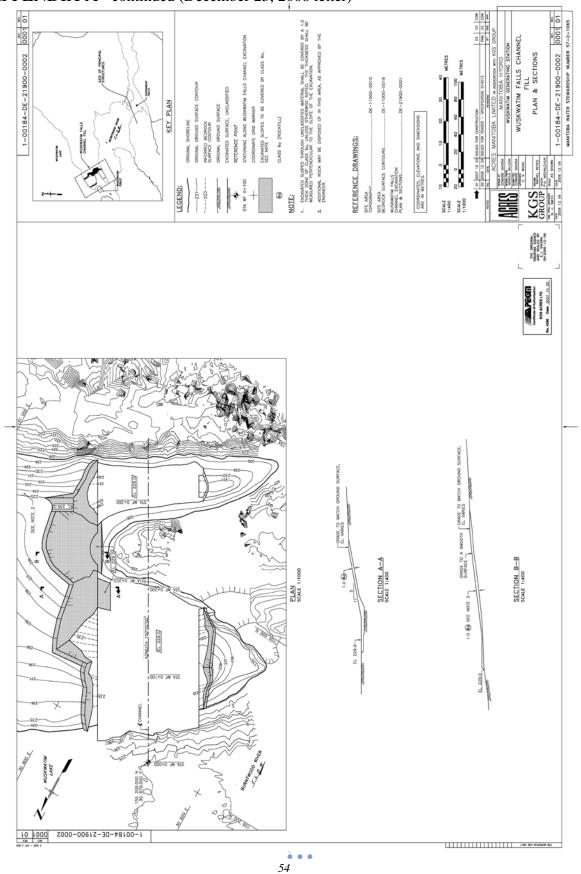
		WUSKWATIM PROJECT INTERIM POWER LICENCE PERMANENT WORKS CONSTRUCTION PLANS
Manitoba Water Stewardship Department File Number	Manitoba Hydro Drawing Number	Plan Title
57-2-1062	1-00184-DE-10100-0003 0001/05	PROJECT GENERAL ARRANGEMENT
57-2-1063	1-00184-DE-10410-0001 0001/04	PRINCIPAL STRUCTURES GENERAL ARRANGEMENT
57-2-1064	1-00184-DE-21010-0001 0001/02	PRINCIPAL STRUCTURES AREA EXCAVATION PLANS & SECTIONS
57-2-1065		WUSKWATIM FALLS CHANNEL FILL PLAN & SECTIONS
57-2-1066	1-00184-DE-22000-0003 0001/03	INTAKE, POWEHOUSE & TAILRACE GENERAL ARRANGEMENT
57-2-1067	1-00184-DE-22000-0003 0008/03	INTAKE, POWEHOUSE & TAILRACE GENERAL ARRANGEMENT
57-2-1068		IINTAKE, POWEHOUSE & TAILRACE GENERAL ARRANGEMENT
57-2-1069	1-00184-DE-22000-0006 0007/02	SERVICE BAY GRAVITY & STRUCTURAL SECTIONS GENERAL ARRANGEMENT
57-2-1070	1-00184-DE-22000-0006 0001/02	SERVICE BAY GRAVITY & STRUCTURAL SECTIONS GENERAL ARRANGEMENT
57-2-1071	1-00184-DE-22000-0006 0008/02	-0006 0008/02 SERVICE BAY GRAVITY & STRUCTURAL SECTIONS GENERAL ARRANGEMENT
57-2-1072	1-00184-DE-23000-0001 0001/02	NON-OVERFLOW DAM SPILLWAY & STOPLOG STORAGE AREA WALL B & WALL C GENERAL
57-2-1073	1-00184-DE-23000-0001 0005/02	NON-OVERFLOW DAM SPILLWAY & STOPLOG STORAGE AREA WALL B & WALL C GENERAL
57-2-1074	1-00184-DE-23000-0001 0008/02	NON-OVERFLOW DAM SPILLWAY & STOPLOG STORAGE AREA WALL B & WALL C GENERAL
57-2-1075	1-00184-DE-23000-0001 0003/02	NON-OVERFLOW DAM SPILLWAY & STOPLOG STORAGE AREA WALL B & WALL C GENERAL
57-2-1076	1-00184-DE-21130-0001 0001/01	MAIN DAM FILL PLANS, SECTIONS & DETAILS
57-2-1077	1-00184-DE-21130-0001 0010/01	MAIN DAM FILL PLANS, SECTIONS & DETAILS
57-2-1078	1-00184-DE-21230-0002 0001/01	NORTH DYKE FILL PLANS, SECTIONS & DETAILS
57-2-1079	1-00184-DE-21230-0002 0003/01	NORTH DYKE FILL PLANS, SECTIONS & DETAILS
57-2-1080		WUSKWATIM-BIRCHTREE 230 KV TRANSMISSION LINE W76B P.I. & WATER CROSSING LOC
57-2-1081	1-34720-DR-10140-0001 0001/00	WUSKWATIM -HERBLET LAKE 230 KV TRANSMISSION LINE W73H & W74H P.I. & WATER CRC
57-2-1082	1-34730-DR-10140-0001 0001/00	HERBLET LAKE-RALLS ISLAND 230 KV TRANSMISSION LINE H75P P.I. & WATER CROSSING
57-2-1083	1-34730-DR-10140-0001 0002/00	HERBLET LAKE-RALLS ISLAND 230 KV TRANSMISSION LINE H75P P.I. & WATER CROSSING

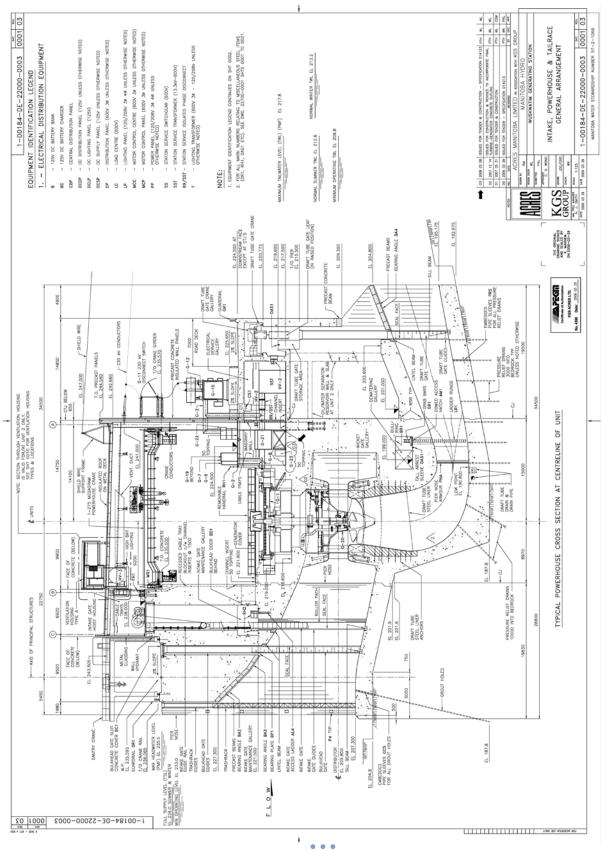


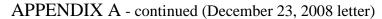
APPENDIX A - continued (December 23, 2008 letter)

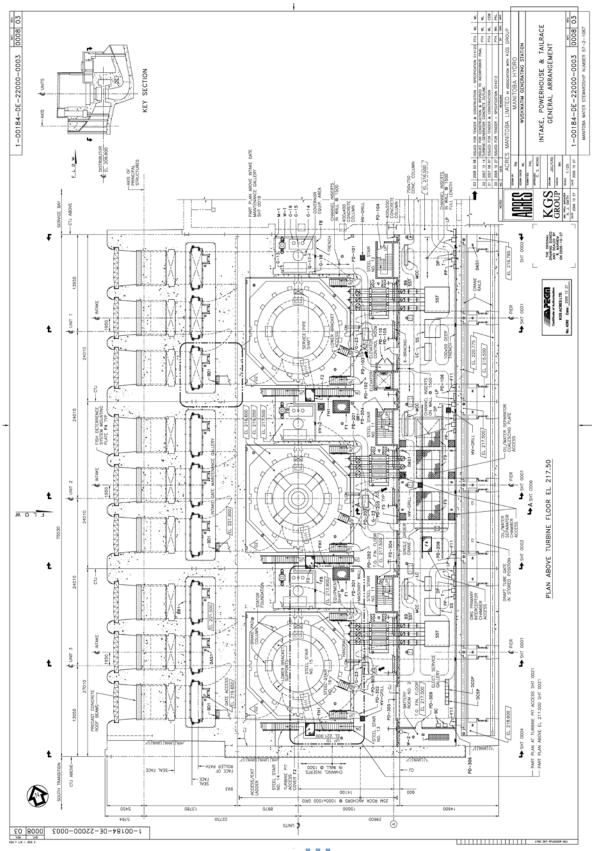




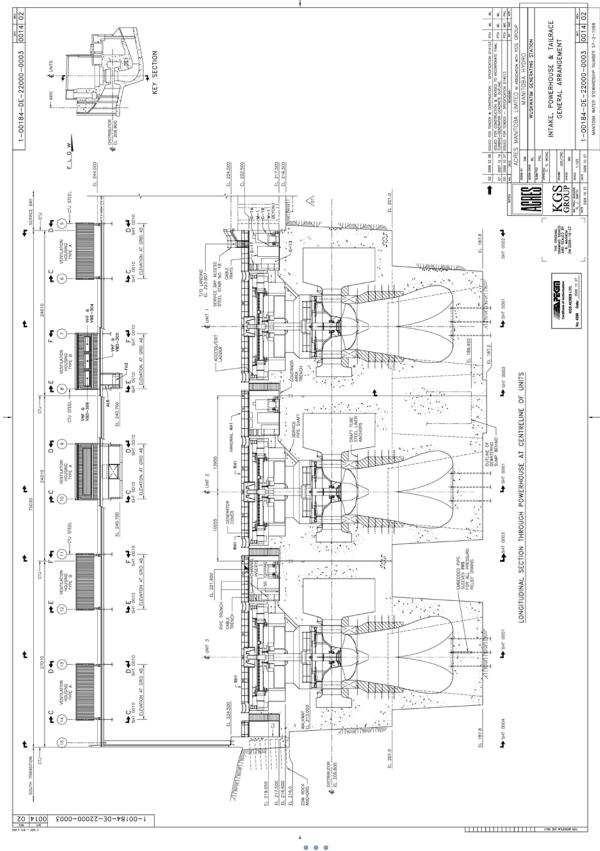


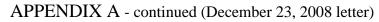


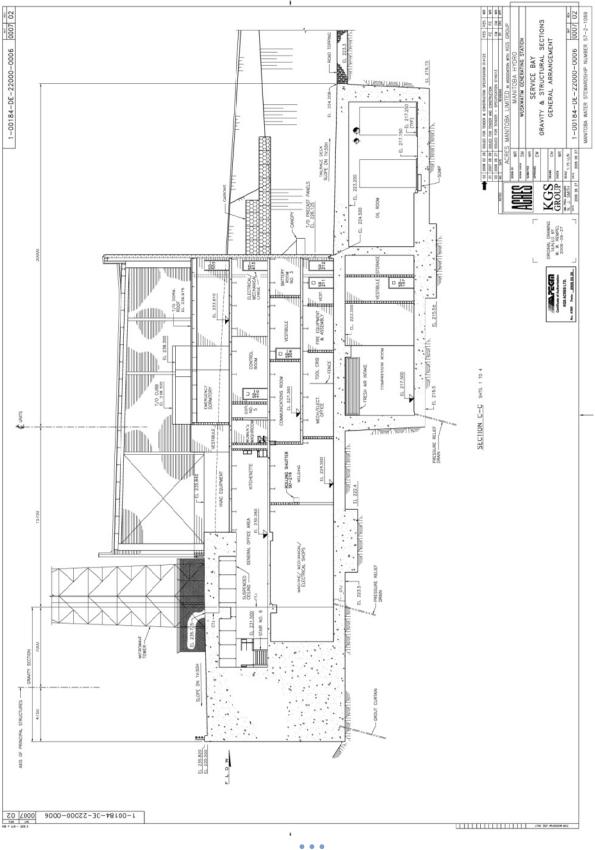




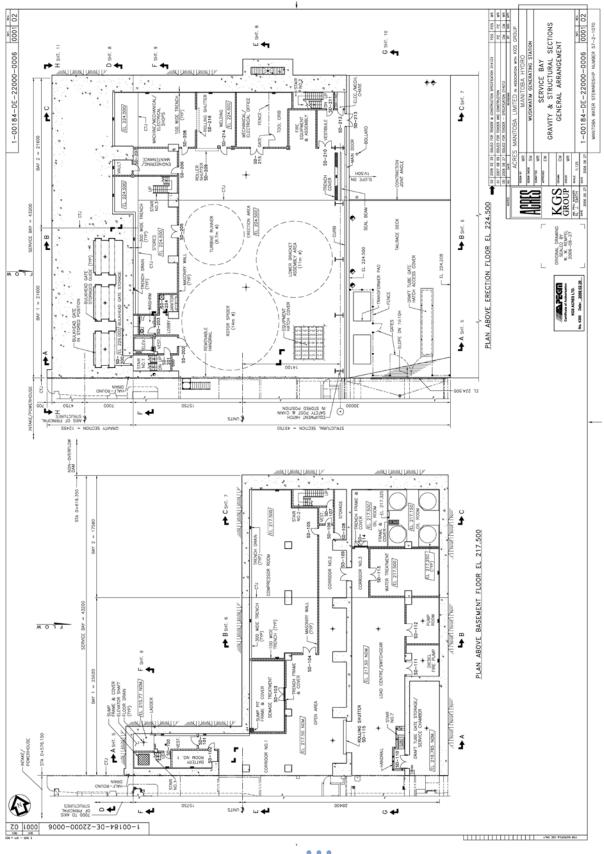
APPENDIX A - continued (December 23, 2008 letter)

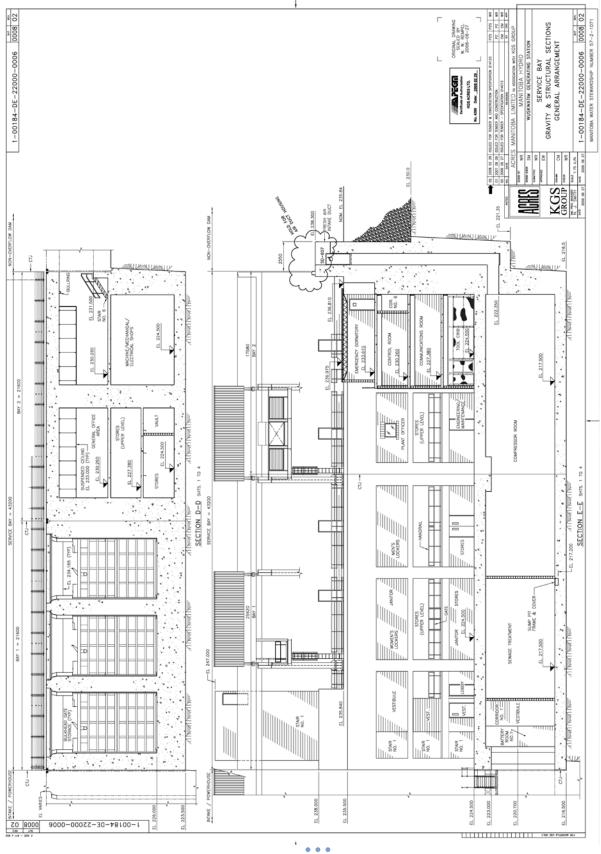




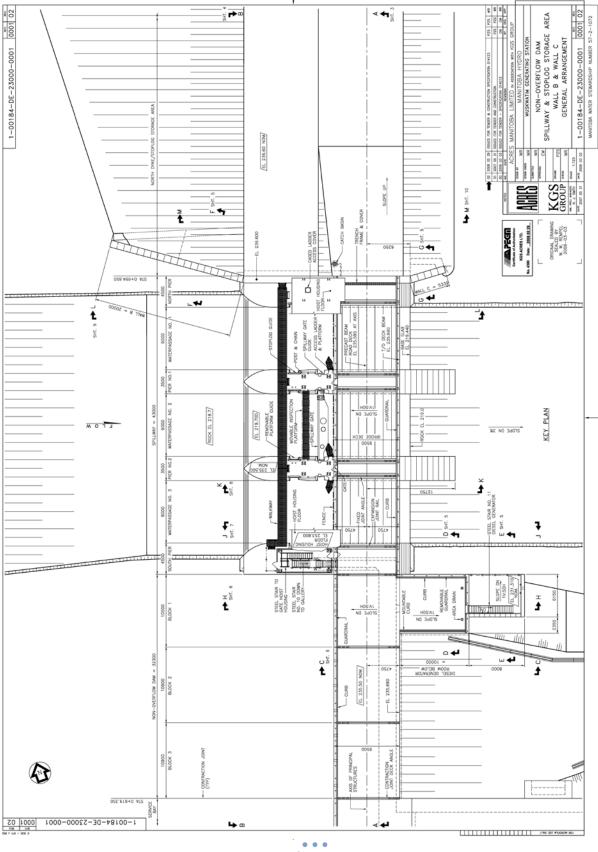


APPENDIX A - continued (December 23, 2008 letter)

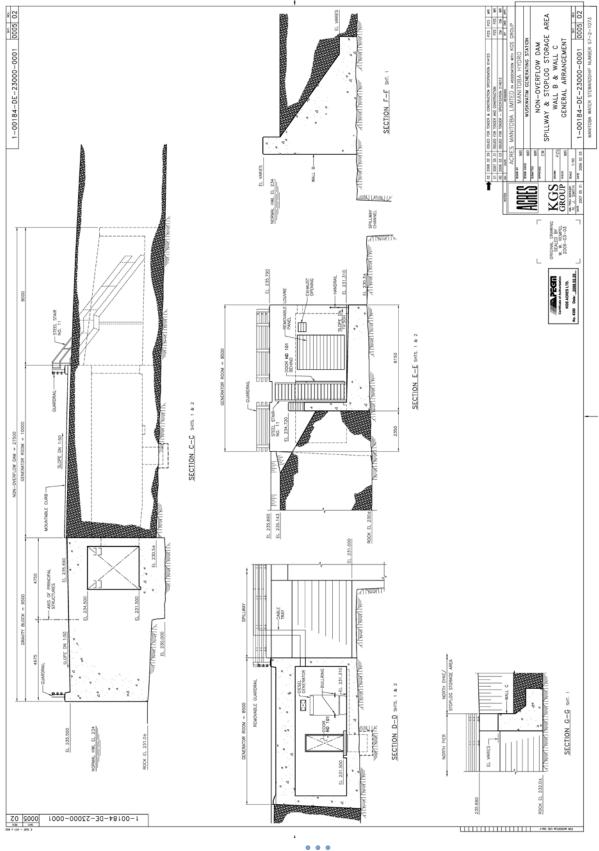


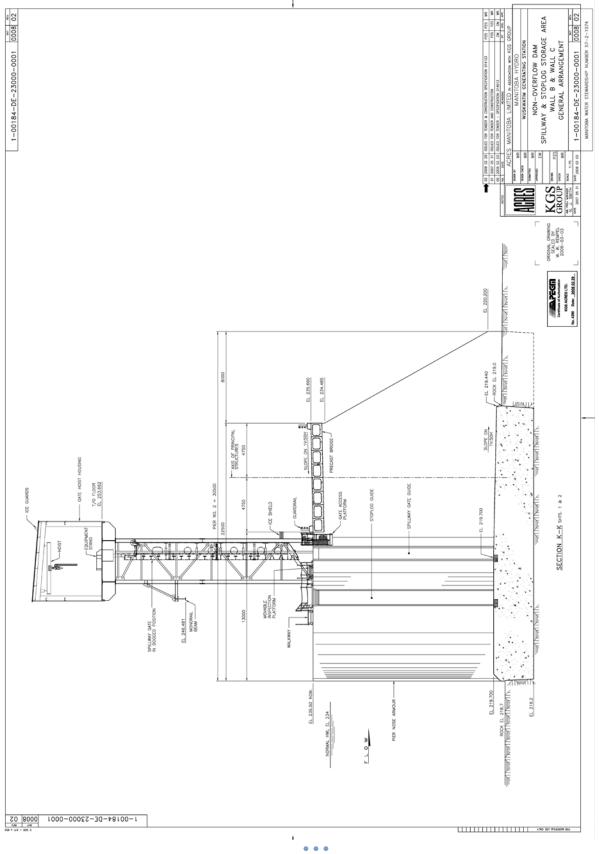


APPENDIX A - continued (December 23, 2008 letter)

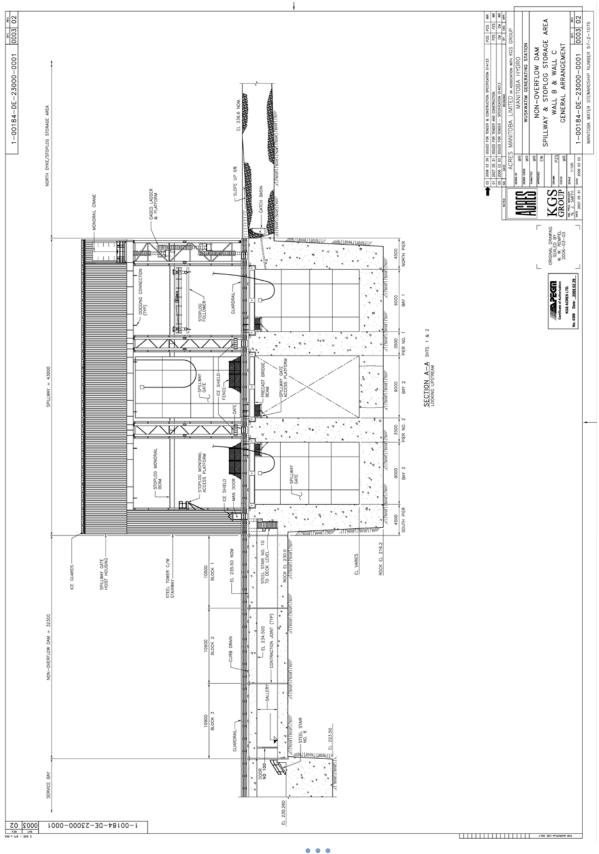


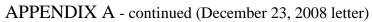
APPENDIX A - continued (December 23, 2008 letter)

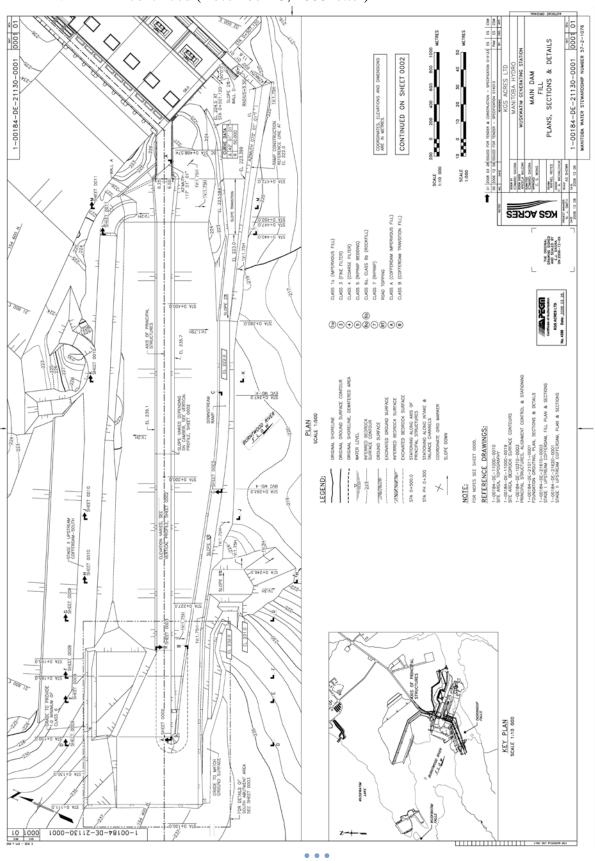




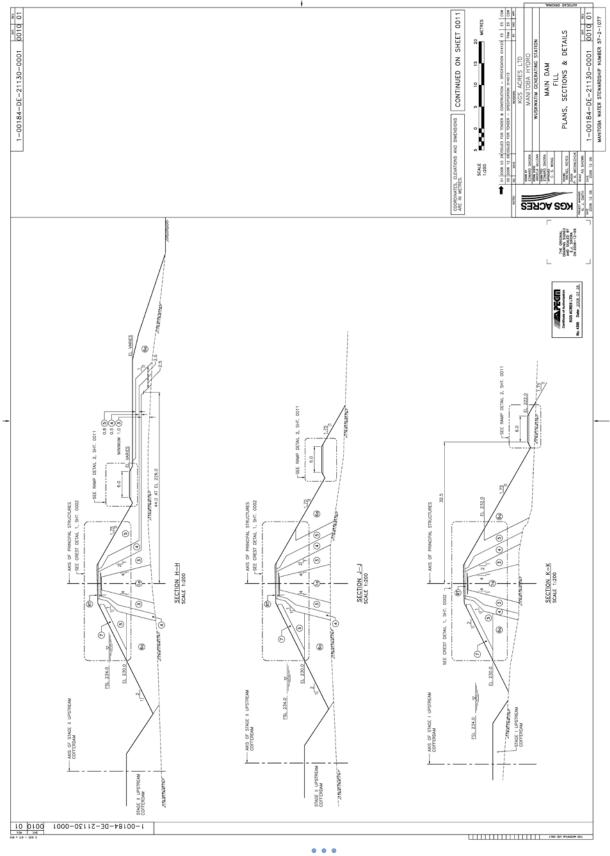
APPENDIX A - continued (December 23, 2008 letter)



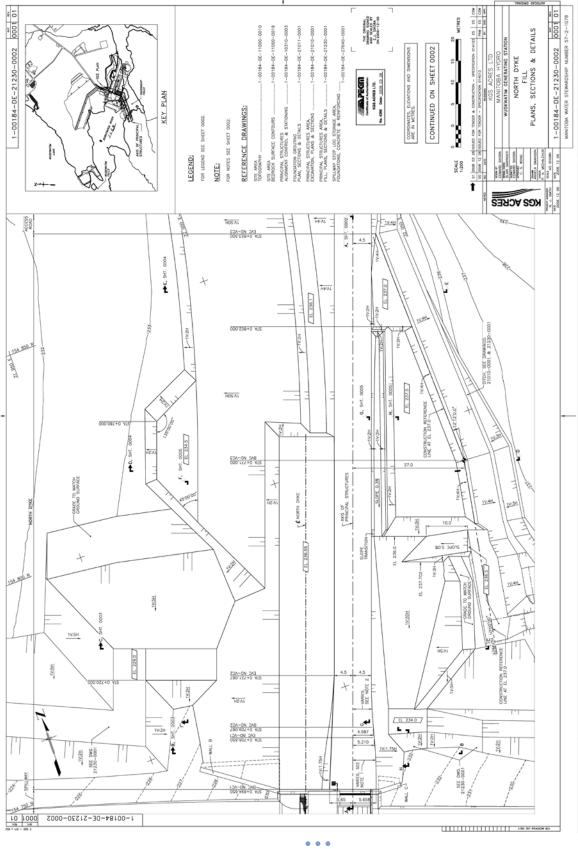


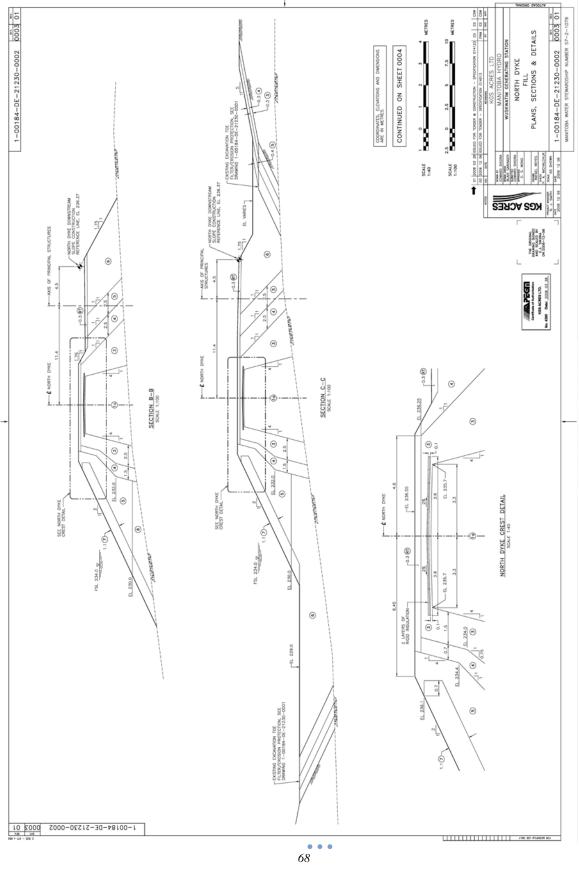


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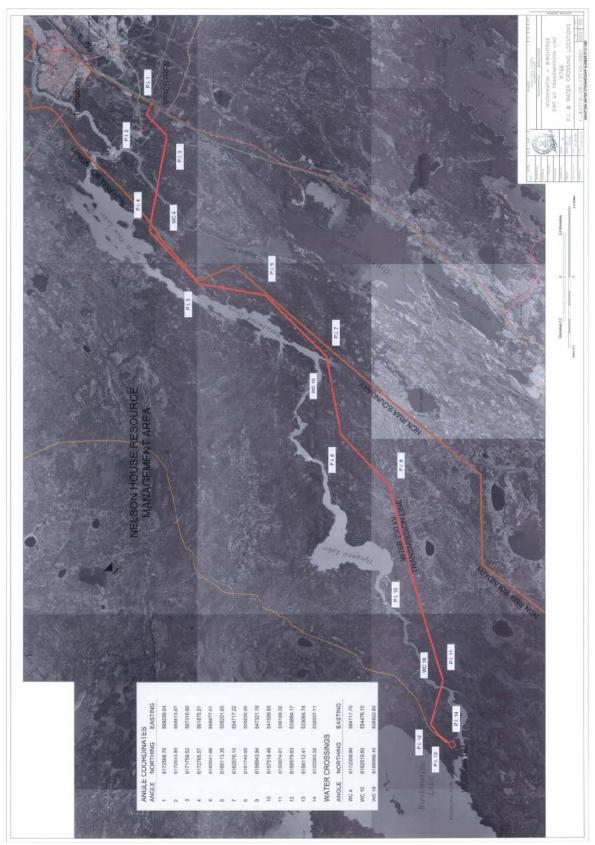


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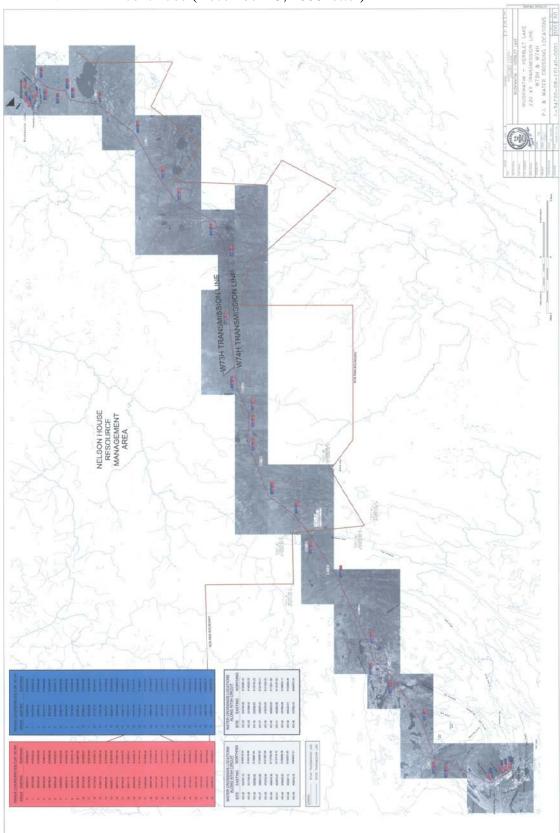


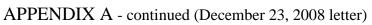
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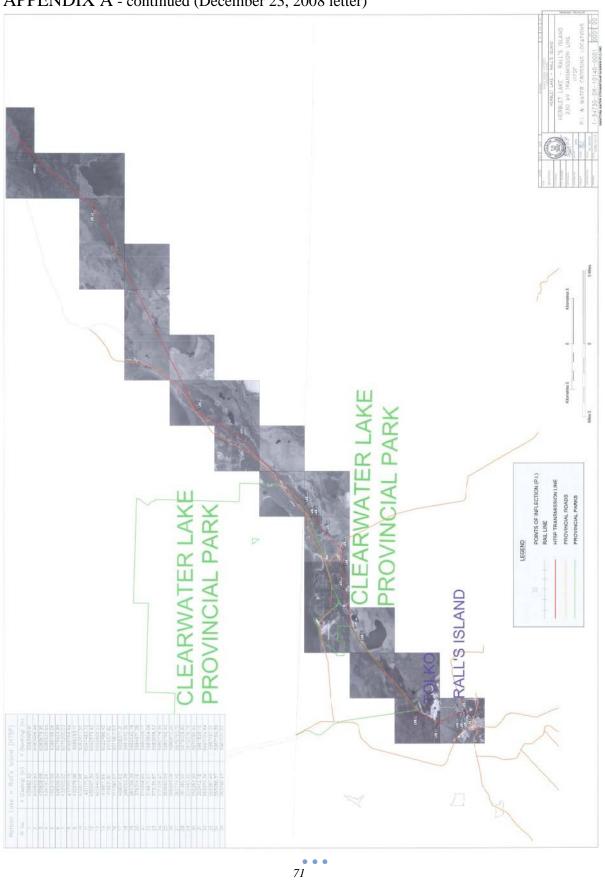


APPENDIX A - continued (December 23, 2008 letter)

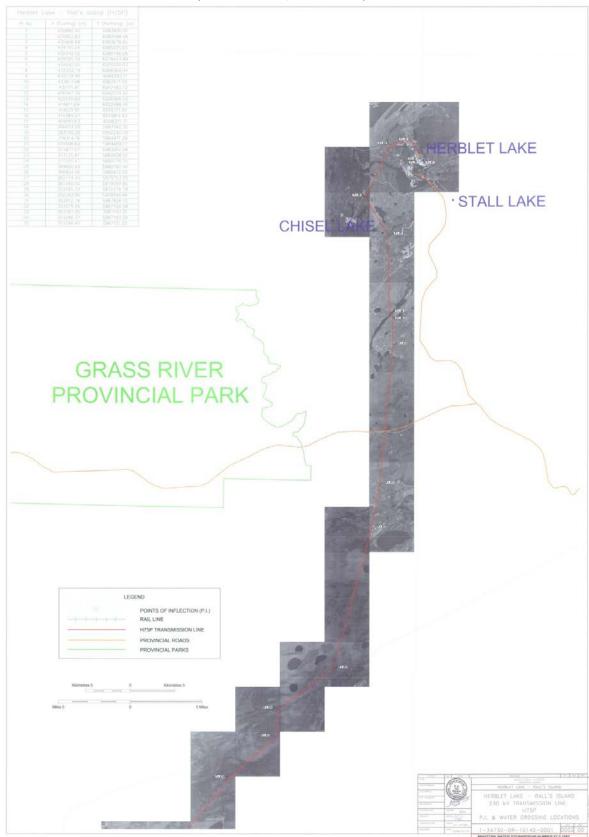
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APPENDIX A - continued (December 23, 2008 letter)



APPENDIX A - continued (December 23, 2008 letter)

APPENDIX A - continued (January 8, 2009 letter)



Water Stewardship

Executive Director Regulatory and Operational Services Box 11, 200 Saulteaux Crescent Winnipeg, Manitoba, Canada R3J 3W3 T 204-945-7488 F 204-945-7419 Steve.Topping@gov.mb.ca

January 8, 2009

FILES: 53.1.5/ED-13-3

B.J. Osiowy, P. Eng. Manager, Hydro Power Planning Department Power Planning and Development Division Manitoba Hydro, Box 815 WINNIPEG MB R3T 2P4

Dear Mr. Osiowy:

RE: Wuskwatim Project, Interim Water Power Licence Permanent Works Construction Plans

We have received your letter dated December 23, 2008, three (3) sets of prints and one digital copy (cd) of the Permanent Works Construction Plans. I note that this information was submitted for our files on behalf of the Wuskwatim Power Limited Partnership (WPLP).

The above plans, along with the Preliminary Works Construction Plans submitted previously on October 13, 2005 on behalf of the WPLP, will serve to fulfill the requirements for general construction plans for the Wuskwatim Generating Station as mandated under sections 21 to 23 of the Water Power Regulation. I understand that all aspects of the construction of the preliminary works are now complete and that construction of the permanent works will begin in the spring of 2009 with an in-service date of 2011 for the first unit.

Thank you for submitting the construction plans and for providing an update on the development of the project. Please call me at (204) 945-7488 or Rob Matthews at (204) 945-6118 if you have any questions.

Yours truly, Original signed by, Steve Topping

Executive Director // Regulatory and Operational Services 00184 07310 -0162-00

c: D. Norquay R. Matthews





73

APPENDIX A - continued (July 16, 2012 letter)



2012 07 16

Mr. Dwight Williamson Assistant Deputy Minister Manitoba Conservation and Water Stewardship Box 11, 200 Saulteaux Cres. Winnipeg, MB R3J 3W3

Dear Mr. Williamson:

RE: WUSKWATIM GENERATING STATION - COMMISSIONING OF UNIT NO. 1

In accordance with the provisions of the Interim Licence for the development of water power at the Wuskwatim site, I am pleased to advise you that turbine-generator Unit No. 1 completed its commissioning runs and was released for commercial service at 17:28 on June 22, 2012 and 5022649 Manitoba Ltd, on behalf of Wuskwatim Power Limited Partnership, is now able to apply the power to beneficial use.

Section 3.3 of the Interim Licence, requires "Upon or before September 1, 2012, the Licensee shall have installed all the machinery and equipment required for an initial development of one (1) unit with a nominal capacity of 70,000 kilowatts (93,800 horsepower) as measured on the turbine shaft and shall be in a position to apply the electric power and energy to beneficial use." The initial development is therefore completed, and it is completed within the stipulated time. I therefore recommend that June 22, 2012 be selected as the date for the purpose of Sections 3.2, 3.5, and 6.1.

Section 3.5 of the Interim Licence requires the Licensee to notify the Department in writing of the commissioning date of each unit within 30 days of commissioning, and when the initial development is completed. This letter fulfills this requirement.

Section 6.1-6.3 states that from the date of completion of the initial development determined in accordance with Section 3.6 of this Interim Licence, and for the duration of this Interim Licence, the Licensee shall pay as rent for use of water for the development of electric power and energy, an amount determined in accordance with the Water Power Regulation. On behalf of the Partnership, Manitoba Hydro has started providing monthly energy production data to Manitoba Conservation and Water Stewardship staff in order that they may calculate water rentals.

Wuskwatim Power Limited Partnership, 100 Portage Avenue, PO Box \$15, Stn. Main, Winnipeg, Manitoba 81C 2P4

APPENDIX A - continued (July 16, 2012 letter)

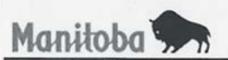
These sections also state that the Licensee shall pay, annually in advance, as rent for the use and occupation of Crown Lands of the Province described in *Section 5.4*. As there is no Crown land impacted by the physicals works of the Project, no land rentals are due now or in the future.

We will continue to keep you and your staff apprised of developments in the construction of the Wuskwatim Generating Station as required by the Interim Licence and Water Power Regulation.

Yours truly,

5022649 Manitoba Ltd. as general partner of the Wuskwatim Power Limited Partnership

Per: Original signed by, Ken Adams APPENDIX A - continued (November 22, 2012 letter)



Conservation and Water Stewardship



Box 11, 200 Saulteaux Crescent Winnipeg MB R3J 3W3 CANADA

http://www.gov.mb.ca/waterstewardship/

November 22, 2012

File No. 53.1.5

Mr. Ken R.F. Adams, Chairman Wuskwatim Power Limited Partnership 360 Portage Avenue P.O. box 815, Stn. Main Winnipeg MB R3C 2P4

Dear Mr. Adams:

Thank you for your letter dated October 17, 2012 regarding the commissioning of the third and final turbine (Unit No. 2) that was released for commercial service on October 6, 2012 by 5022649 Manitoba Ltd, on behalf of the Wuskwatim Power Limited Partnership. This date will be used for administrative purposes under *The Water Power Act* and the Interim Licence.

Your October 17, 2012 letter satisfies the following:

- Section 3.5 of the Interim Licence states 'The Licensee shall notify the Department in writing of the commissioning date of each unit within 30 days of commissioning, and when the initial development is completed, and also when each unit is placed into commercial service.' Manitoba Conservation and Water Stewardship concurs that your letter fulfils the requirements as per Section 3.5 of the Interim Licence.
- Section 3.4 of the Interim Licence states 'Upon or before March 31, 2013, the Licensee shall have installed an additional two (2) units and shall have satisfactorily completed the Undertaking consisting of three (3) units. The three (3) units shall have a nominal capacity of 210,000 kilowatts as measured on the turbine shaft.' Manitoba Conservation and Water Stewardship concurs the project has been completed within the stipulated time.

In an exchange of correspondence, we have agreed that final drawings and capital costs of the Undertaking, as defined in Section 2.2 of the Interim Licence, will be provided within 90 days after the final unit goes into commercial operation. Please forward the aforementioned information to Manitoba Conservation and Water Stewardship on or before January 4, 2013, to fulfill the requirements of Subsections 35(1) and 36(1) of the Water Power Regulation.

APPENDIX A - continued (November 22, 2012 letter)

Furthermore, Manitoba Conservation and Water Stewardship will use June 22, 2012, the date when the first turbine (Unit No 1) was released for commercial service, as the date of completion of the initial development for the purpose of water power licensing for the Wuskwatim Generating Station.

Sincerely, Original signed by, Dwight Williamson

Dwight Williamson Assistant Deputy Minister

c: Puru Singh, Rob Matthews, Gord Hannon

APPENDIX A - continued (August 28, 2012 letter)



2012 08 28

Mr. Dwight Williamson Assistant Deputy Minister Manitoba Conservation and Water Stewardship Box 11, 200 Saulteaux Cres. Winnipeg, MB R3J 3W3

Dear Mr. Williamson:

RE: WUSKWATIM GENERATING STATION-COMMISSIONING OF UNIT NO. 3

In accordance with the provisions of the Interim Licence for the development of water power at the Wuskwatim site, I am pleased to advise you that a second turbine-generator Unit No. 3 completed its commissioning runs and was released for commercial service at 10:10 a.m., on August 22, 2012 and 5022649 Manitoba Ltd., on behalf of Wuskwatim Power Limited Partnership, is now able to apply the power to beneficial use.

This letter fulfills this requirement of *Section 3.5* of the Interim Licence requiring the Licensee to notify the Department in writing of the commissioning date of each unit within 30 days of commissioning.

We will continue to keep you and your staff apprised of developments in the construction of the Wuskwatim Generating Station as required by the Interim Licence and Water Power Regulation.

Yours truly,

5022649 Manitoba Ltd. as general partner of the Wuskwatim Power Limited Partnership

Original signed by, Ken Adams

Wuskwatim Power Limited Partnership, 300 Portage Avenue, PO Box 815, Stn. Main, Winnipeg, Manituba R3C 2P4

APPENDIX A - continued (October 17, 2012 letter)



2012 10 17

Mr. Dwight Williamson Assistant Deputy Minister Manitoba Conservation and Water Stewardship Box 11, 200 Saulteaux Cres. Winnipeg MB R3J 3W3

Dear Mr. Williamson:

RE: WUSKWATIM GENERATING STATION-COMMISSIONING OF UNIT NO. 2 AND PROJECT COMPLETION

In accordance with the provisions of the Interim Licence for the development of water power at the Wuskwatim site, I am pleased to advise you that the third and final turbine-generator Unit No. 2 completed its commissioning runs and was released for commercial service at 13:41 on October 6, 2012 and 5022649 Manitoba Ltd, on behalf of Wuskwatim Power Limited Partnership, is now able to apply the power to beneficial use.

Section 3.5 of the Interim Licence requires the Licensee to notify the Department in writing of the commissioning date of each unit within 30 days of commissioning. This letter fulfills this requirement.

Section 3.4 of the Interim Licence requires "Upon or before March 31, 2013, the Licensee shall have installed an additional two (2) units and shall have satisfactorily completed the Undertaking of three (3) units. The three (3) units shall have a nominal capacity of 210,000 kilowatts as measured on the turbine shaft." The project is therefore completed within the stipulated time.

With the commissioning of the last unit, The Wuskwatim Power Limited Partnership has now completed all the works for which the interim licence was issued for the Wuskwatim site. We believe we have fulfilled all the requirements of the Interim Licence, with the exception of providing the final construction drawings and capital cost of the Undertaking. We intend to provide these in accordance with subsections 35(1) and 36(1) of the Water Power Regulation and within the time authorized in your letter dated September 24, 2012. The time authorized is "... within 90 days after the final unit goes into commercial operation ..."

Nuskwatim Power Limited Partnership, 366 Portage Avenue, PD Box 815, Ste. Main, Winnipey, Manitoba R3C 2P4

APPENDIX A - continued (October 17, 2012 letter)

Mr. Dwight Williamson 2012 10 17 Page 2

Additionally, the Wuskwatim Power Limited Partnership requests that Manitoba Conservation and Water Stewardship confirm June 22, 2012 as the date of completion of the initial development for the purposes of sections 3.2, 3.5, and 6.1 of the Interim Licence.

Yours truly,

5022649 Manitoba Ltd. as general partner of the Wuskwatim Power Limited Partnership

Original signed by, Ken Adams

APPENDIX A - continued (July 18, 2007)



P.O. Box 815 • Winnipeg Manitoba Canada • R3C 2P4 Telephone / N° de téléphone : (204) 474-3018 • Fax / N° de télécopieur : (204) 452-5639 tmmiles@hydro.mb.ca

2007 07 18

Our file: 00184-07310-0158 00

Mr. Steve Topping, P.Eng. Executive Director Regulatory & Operational Services Manitoba Water Stewardship Box 11, 200 Saulteaux Crescent Winnipeg MB R3J 3W3

Dear Mr. Topping,

Re: Wuskwatim Generating Station - Licence Implementation Guide

Enclosed for your approval is the Wuskwatim Generating Station Licence Implementation Guide for Water Levels. This report has been prepared in accordance with Clause 31 of Environment Act Licence No. 2699 and Section 10.2 of the Wuskwatim Interim Water Power Act licence.

The Wuskwatim Power Limited Partnership is required to prepare a report that shows the locations of water level monitoring stations; outlines the methodologies used to determine wind and wave effects and describes proposed reporting procedures. Manitoba Hydro is acting on behalf of the partnership with respect to this regulatory requirement as per the Wuskwatim Project Development Agreement.

This report was prepared in collaboration with staff from your Water Science and Management Branch and has been reviewed by your Water Use Licensing Section and Environmental Assessment and Licensing Branch.

Please contact me at 474-3018 if you have any questions or require additional information.

Original signed by:

Wesley Penner for Terry Miles

T. M. Miles, P.Eng. Manager Hydraulic Operations Department

WVP/ljm/0158_00.doc Encl.

cc: K.R.F.Adams



Conservation and Water Stewardship

Box 16, 200 Saulteaux Crescent Winnipeg MB R3J 3W3 CANADA http://www.gov.mb.ca/waterstewardship/

November 6, 2013

File: 53.1.5

Mr. W. V. Penner, P. Eng. Manager Hydraulic Operations Department Manitoba Hydro P.O. Box 815 Winnipeg, MB R3C 2P4

Dear Mr. Penner:

Re: Wuskwatim Generating Station - Licence Implementation Guide

This correspondence acknowledges receipt and acceptance of the Wuskwatim Generation Station – Licence Implementation Guide for Water Levels dated July 2007. This report has been prepared in accordance with Section 10.2 of the Wuskwatim Interim Water Power Act licence.

This Licence Implementation Guide has and continues to be a valuable resource for Water Power Licensing staff. If you require further assistance please contact feel free to contact Puru Singh any time at 204-945-3613, or email at <u>Purushottam.Singh@gov.mb.ca</u>.

Yours Truly, Original signed by, Rob Matthews

> Rob Matthews Manager Water Use Licensing Section

c: B. Webb, P. Singh

APPENDIX A - continued (September 24, 2012 letter)



Conservation and Water Stewardship

Box 11, 200 Saulteaux Crescent Winnipeg MB R3J 3W3 CANADA

http://www.gov.mb.ca/waterstewardship/

September 24, 2012

File No.: 53.1.5

Mr. Ken R.F. Adams, Chairman Wuskwatim Power Limited Partnership 360 Portage Avenue P.O. Box 815, Stn. Main Winnipeg MB R3C 2P4

Dear Mr. Adams:

Thank you for your letter dated August 24, 2012 regarding the submission of final construction drawings and fixation of construction costs upon completion of the initial development of the Wuskwatim Generating Station.

Sections 35(1) and 36(1) of <u>The Water Power Regulation</u> indicates that final construction plans and fixation of construction costs be provided to the Director within 90 days after the completion of the initial development. This procedure is then repeated after each additional generating unit goes into commercial operation.

It is understood from your letter that all the three units will be in operation by December 2012, which is three months ahead of the target completion date. Considering this, Manitoba Conservation and Water Stewardship (MCWS) concurs with Wuskwatim Power Limited Partnership that a single submission is more efficient and still meets the intent of the Regulation.

Manitoba Conservation and Water Stewardship therefore approves the request of the Wuskwatim Power Limited Partnership to produce a single submission to MCWS within 90 days after the final unit goes into commercial operation in late 2012.

Please feel free to contact me at any time at the above address, by calling (204) 945-7030, or email at Dwight.Williamson@gov.mb.ca.

Sincerely Original signed by, Dwight Williamson

Dwight Williamson Assistant Deputy Minister

c: Rob Matthews, Puru Singh

APPENDIX A - continued (December 28, 2012)



2012 12 28

Mr. Dwight Williamson Assistant Deputy Minister Manitoba Conservation and Water Stewardship Box 11, 200 Saulteaux Cres. Winnipeg, MB R3J 3W3

Dear Mr. Williamson:

RE: WUSKWATIM GENERATING STATION FINAL CONSTRUCTION DRAWINGS AND CAPITAL COST

The enclosed final construction drawings and the capital cost statement shown below are the remaining obligations of the Interim Licence. These are provided prior to January 4, 2013 as determined in accordance with your September 24, 2012 letter. We believe that this submission completes all the requirements of the Interim Licence for the development of water power at the Wuskwatim site.

The final construction drawings are provided pursuant to subsections 35(1) and 35(2) of the Water Power Regulation. A list of the enclosed drawings is shown in Table 1.

The capital or "actual cost" as calculated in accordance with subsection 36(1) of the Water Power Regulation is \$1,448.6 million.

With your concurrence that we have fulfilled all the requirements of the Interim Licence we will, after a period of operating experience, request a Final Licence for this project.

Yours truly,

5022649 Manitoba Ltd. as general partner of the Wuskwatim Power Limited Partnership

Original signed by, Ken Adams

KRFA/dn Enclosures

Wuskwatim Power Limited Partnership, 360 Parlage Avenue, PO Bax 815, 31s. Main, Winnipeg, Manitoba 83C 2P

Table 1

LIST OF FINAL CONSTRUCTION DRAWINGS FOR WUSKWATIM

Licensee File Number	Plan Title	
1-00184-DD-07311-0033-0001_00	Wuskwatim Project Location Plan	
1-00184-DE-07311-0002-0001_01	Stage 4 Studies Project Area Plan	
1-00184-DE-07311-0003-0001_01	Stage 4 Studies Principal Structures General Arrangement Plan	
1-00184-DE-07311-0004-0001_01	River Diversion During Construction Plans	
1-00184-DE-07311-0005-0001_01	River Diversion During Construction Sections	
1-00184-DE-07311-0006-0001_01	Principal Concrete Structures Plan	
1-00184-DE-07311-0007-0001_01	Intake and Powerhouse Sections	
1-00184-DE-07311-0008-0001_01	Service Bay Section	
1-00184-DE-07311-0009-0001_01	Powerhouse Plans	
1-00184-DE-07311-0010-0001_01	Intake and Powerhouse Water Passage Plans	
1-00184-DE-07311-0011-0001_01	Intake and Powerhouse & Service Bay Plans	
1-00184-DE-07311-0012-0001_01	Intake and Powerhouse & Service Bay Plan Above Generate Floor	
1-00184-DE-07311-0013-0001_01	Service Bay Plans	
1-00184-DE-07311-0014-0001_01	Intake and Service Bay Longitudinal Sections	
1-00184-DE-07311-0015-0001_01	Powerhouse and Service Bay Longitudinal Section at CL Units	
1-00184-DE-07311-0016-0001_01	Powerhouse and Service Bay Longitudinal Section Through Dewatering Galley	
1-00184-DE-07311-0017-0001_01	Spillway and Non-Overflow Dam Plan and Sections	
1-00184-DE-07311-0018-0001_01	Walls, Diesel Generator Room & South Transition Structure Plan and Sections	
1-00184-DE-07311-0019-0001_01	Earth and Rock Fill Structures Sections	
1-00184-DE-07311-0020-0001_01	Stage 4 Studies Spillway Approach and Discharge Channels Sections	
1-00184-DE-07311-0021-0001_01	Upstream Channel Improvements Plan and Sections	
1-00184-DE-22000-0003-0008_06	Intake, Powerhouse & Tailrace General Arrangement	
1-00184-DE-22000-0003-0014_04	Intake, Powerhouse & Tailrace General Arrangement	

APPENDIX A - continued (January 15, 2014 letter)



2014 01 15

Mr. R. Matthews Manager, Water Use Licensing Manitoba Conservation and Water Stewardship Box 16 - 200 Saulteaux Crescent Winnipeg, MB R3J 3W3

Dear Mr. Matthews:

RE: WUSKWATIM GENERATING STATION - FINAL CONSTRUCTION DRAWINGS RESUBMISSION

The enclosed final construction drawings are a resubmission of those sent on December 28, 2012. The enclosed drawings each bear a seal by a Professional Engineer that was absent in all but one of the drawings sent previously. Two drawings showing the river during construction are not enclosed as they do not show the final constructed state.

Please destroy the previous set of drawings.

These final construction drawings are provided pursuant to subsections 35(1) and 35(2) of the Water Power Regulation. A list of the enclosed drawings is shown in Table 1.

Yours truly,

5022649 Manitoba Ltd. as general partner of the Wuskwatim Power Limited Partnership Original signed by, Ken Adams

Per: Ken R.F. Adams, Chairman

Enclosure

Wuskwatim Power Limited Partnership, 360 Portage Avenue, PO Box 815, Stn. Main, Winnipeg, Manitoba R3C 2P4

APPENDIX A - continued (January 15, 2014 letter)

Table 1

LIST OF FINAL CONSTRUCTION DRAWINGS FOR WUSKWATIM

Department File	Licensee File Number	Plan Title	
Number			
57-2-1019	1-00184-DD-07311-0033-0001_00	Wuskwatim Project Location Plan	
57-2-1020	1-00184-DE-07311-0002-0001_02	Project Area Plan	
57-2-1021	1-00184-DE-07311-0003-0001_02	Principal Structures General Arrangement Plan	
57-2-1030	1-00184-DE-07311-0006-0001_02	Principal Concrete Structures Plan	
57-2-1031	1-00184-DE-07311-0007-0001_02	Intake and Powerhouse Sections	
57-2-1032	1-00184-DE-07311-0008-0001_02	Service Bay Section	
57-2-1033	1-00184-DE-07311-0009-0001_02	Powerhouse Plans	
57-2-1034	1-00184-DE-07311-0010-0001_02	Intake and Powerhouse Water Passage	
		Plans	
57-2-1035	1-00184-DE-07311-0011-0001_02	Intake and Powerhouse & Service Bay Plans	
57-2-1036	1-00184-DE-07311-0012-0001_02	Intake and Powerhouse & Service Bay Plan Above	
		Generator Floor	
57-2-1037	1-00184-DE-07311-0013-0001_02	Service Bay Plans	
57-2-1038	1-00184-DE-07311-0014-0001_02	Intake and Service Bay Longitudinal Sections	
57-2-1039	1-00184-DE-07311-0015-0001_02	Powerhouse and Service Bay Longitudinal Section at Centerline Units	
57-2-1040	1-00184-DE-07311-0016-0001_02	Powerhouse and Service Bay Longitudinal Section	
57.0.40.44	1 00184 DE 07311 0017 0001 00	Through Dewatering Galley	
57-2-1041	1-00184-DE-07311-0017-0001_02	Spillway and Non-Overflow Dam Plan and Sections	
57-2-1042	1-00184-DE-07311-0018-0001_02	2 Walls, Diesel Generator Room & South Transition Structure Plan and Sections	
57-2-1044	1-00184-DE-07311-0019-0001 02	Earth and Rock Fill Structures Sections	
57-2-1043	1-00184-DE-07311-0020-0001 02	Spillway Approach and Discharge Channels Sections	
57-2-1045	1-00184-DE-07311-0021-0001 02	Upstream Channel Improvements Plan and Sections	
	1-00184-DE-22000-0003-0008 06	Intake, Powerhouse & Tailrace General Arrangement	
	1-00184-DE-22000-0003-0014_04	Intake, Powerhouse & Tailrace General Arrangement	

Appendix B: Maximum Forebay Level Excursions – Licence Term #4.2

APPENDIX B

Events Exceeding Wuskwatim Water Power Act Interim Licence Term 4.2 as defined in Section 4.1 of the Wuskwatim Licence Implementation Guide

The Wuskwatim GS Licence Implementation Guide for Water Levels defines compliance as:

- 1. The Wuskwatim Mean Daily Water Level (with wind and wave effects eliminated) not exceeding 234.0 metres, and
- 2. The Wuskwatim Hourly Water Level not exceeding 234.1 metres more than two time for two consecutive hours each time in any 24-hour period.

Based on this definition of compliance, the following tables and chart (Figure 4) provide a review of the Wuskwatim Lake Mean Daily Water Level exceedances from September 2012 to present. All exceedances were reported to MCWS. All reports were attached to the Annual Water Levels Report for Wuskwatim GS.

On an hourly basis, the maximum water level constraint on Wuskwatim GS was satisfied 100% of the time.

On a mean daily basis (with wind and wave effects eliminated), the maximum water level constraint on Wuskwatim GS was satisfied 99% of the time. As noted in Table 3, this value is based on 12 incidents out of a possible 1217. Table 4 provides additional detail regarding each daily incident by year of operation. Approximately half of all mean daily exceedances were caused by inadequate alarm settings at the powerhouse, while the remaining half was caused by ice restrictions at the outlet of Wuskwatim Lake.

During the first two years of operation, operator inexperience in alarm control setting attributed to this cause of water level exceedance. All exceedances from 2014 and onward were caused by natural causes which resulted in the restriction of water conveyance from Wuskwatim Lake.

Table 3: Summary of Wuskwatim Lake Water Levels deviated outside the licence limit from	
2012-Present	

Location	Constraint	Variable	Total Number of Exceedance	Total Number of Readings	% Compliance
Wuskwatim Lake	Max Forebay Elevation	Mean Daily Water Level	12	1217	99.01 %

Date	Days > 234.0 m	Maximum Level (m)	Explanation	
October 15-16, 2012	2	234.02	Error in station alarm setting. The difference in water level between Wuskwatim Lake and the forebay was not accounted for. Alarm setting was corrected (lowered) after the incident. File 00184-07311-0010_00.	
April 3, 2013	1	234.02	Forebay level increased due to an unforeseen unit forced outage. Since then, the alarm was set lower for sustained high forebay operation to avoid similar future incident. File 00184-07311-0015_00.	
Sept 16-18, 2013	3	234.02	The forebay alarm was not set for sustained outflow operation during scheduled unit maintenance. File 00184-07311-0019_00.	
April 1, 2014	1	234.01	Ice restrictions at the Wuskwatim Lake outlet caused exceedance. File 00184-07311-0024_00	
January 24-28, 2015	5	234.02	Ice restrictions at the Wuskwatim Lake outlet caused the exceedance. File 00184-07311-0033_00	

Table 4: 2012-2015 Wuskwatim Lake Mean Daily Water Level Exceedances

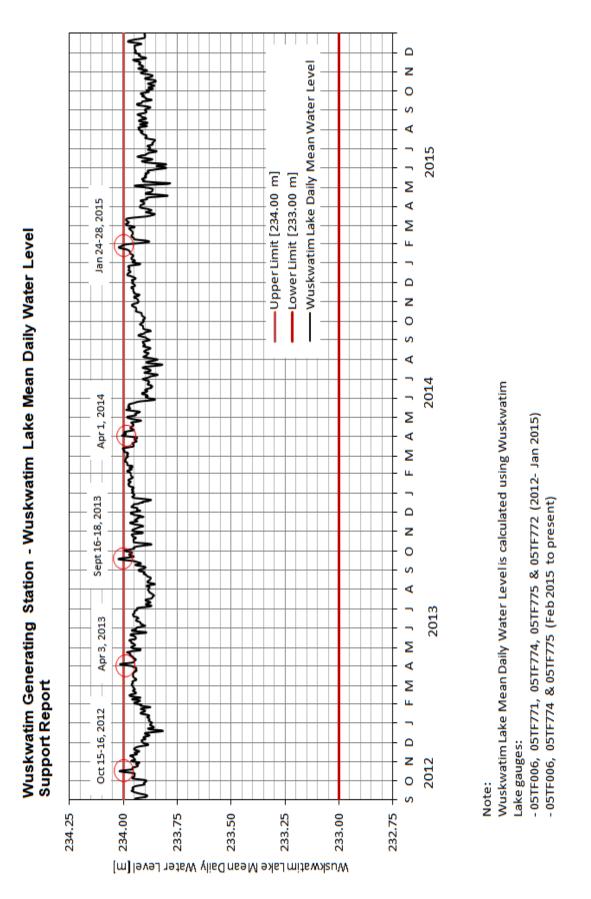


Figure 4 Wuskwatim Lake Mean Daily Water Level Exceedances

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Appendix C: Land and Water Rentals Supporting Documentation

Appendix C Land and Water Rentals Supporting Documentation

The appendix contains a copy of the supporting documents relevant to the articles on land and water rentals for Limestone Generating Station. The following is a list of all relevant documents along with the page number location:

Land Rentals

• April 7, 2014 letter confirming land rentals payments not required, page 94.

Water Rentals

• February 29, 1996 letter advising a change to timing of water rental payments, page 95.

APPENDIX C - continued (April 7, 2014 letter)



360 Portage Ave (16) • Winnipeg Manitoba Canada • R3C 0G8 Telephone / N° de téléphone : 204-360-3018 • Fax / N° de télécopieur : 204-360-6136 wvpenner@hydro.mb.ca

2014 04 07

File: 00184-07315-0001 00

Ms. S. Romano Water Use Licensing Manitoba Conservation and Water Stewardship Box 16-200 Saulteaux Crescent Winnipeg MANITOBA R3J 3W3

Dear Ms. Romano:

WUSKWATIM LAND RENTALS

As requested in your 2014 03 13 letter, I confirm that there are no land rentals associated with the Wuskwatim Generating Station.

No land rentals are chargeable for the Wuskwatim Generation Station on the Burntwood River because the Wuskwatim Power Limited Partnership has purchased all associated Crown lands. Land use rental fees apply to Crown lands occupied for water power purposes as outlined in section 48(3.1) of the Water Power Regulation. The lands considered occupied would fall under items (a) to (e) of section 24(2) for an interim licence and items (i) to (v) of section 44(d) for a final licence. Wuskwatim lands attributed to these five categories are owned by the partnership rather than the Crown so that land rental charges are not applicable.

Yours truly,

Original signed by:

Wesley Penner, P.Eng. Hydraulic Operations Department Manager

HJE/s1

cc. J..Kidd-Hantscher, Manitoba Hydro

••• 94

Manitoba

RECEIVED



Deputy Minister of Natural Resources

FEB 29 1996

Legislative Building Winnipeg, Manitoba, CANADA R3C 0V8

EXECUTIVE VICE-PRESIDENT ENGINEERING AND ENVIRONMENT

FEB 2 9 1996

Mr. Ralph O. Lambert Executive Vice President Manitoba Hydro P.O. Box 815 Winnipeg, Manitoba R3C 2P4

Dear Mr. Lambert:

The purpose of this letter is to notify Manitoba Hydro of a change in billing practice for water use rental as provided in The Water Power Act and Regulations.

Heretofore charges for water power rental have been applied at the end of each calendar year based on the actual usage for that year. Beginning with the month of May 1996, water power rental charges will be applied monthly. The methodology of doing so will be decided after consultation with Manitoba Hydro staff.

Early in May, an invoice will be issued for the months of January, February, March, and April of 1996 to bring the water use rental charges up to date for the start of monthly billing.

The details of the monthly billing procedure will be CIRCULATE communicated to you after the above noted consultations have ROL ROL

Staff look forward to working cooperatively with Manitoba Hydro in the implementation of this revised billing practice.

	President and a second s				
		ROL			
		EAZ			
1		PEB-F			
		DGC			
		ADC			
		ETF			
1		DOV	_		

Yours truly, Original signed by, David Tomasson

David Tomasson Deputy Minister

1996 02 29 xc: E.A. Zaleski "ROL"

RECEIVED
FEB 29 1996
DIVISION MANAGER SYSTEM OPERATING DIVISION
AND A DESCRIPTION OF A

Appendix D: List of Final Construction and Licence Plans

Department File Number	Licensee's drawing number	Description
57-2-1060	1-00184-DD-07311-0034-0001_01	Severance Line and Lands Required for Flooding and Other Purposes
57-2-1019	1-00184-DD-07311-0033-0001_00	Wuskwatim Project Location Plan
57-2-1020	1-00184-DE-07311-0002-0001_01	Project Area Plan
57-2-1021	1-00184-DE-07311-0003-0001_01	Principal Structures General Arrangement Plan
57-2-1030	1-00184-DE-07311-0006-0001_01	Principal Concrete Structures Plan
57-2-1031	1-00184-DE-07311-0007-0001_01	Intake and Powerhouse Sections
57-2-1032	1-00184-DE-07311-0008-0001_01	Service Bay Section
57-2-1033	1-00184-DE-07311-0009-0001_01	Powerhouse Plans
57-2-1034	1-00184-DE-07311-0010-0001_01	Intake and Powerhouse Water Passage Plans
57-2-1035	1-00184-DE-07311-0011-0001_01	Intake and Powerhouse & Service Bay Plans
57-2-1036	1-00184-DE-07311-0012-0001_01	Intake and Powerhouse & Service Bay Plan Above Generator Floor
57-2-1037	1-00184-DE-07311-0013-0001_01	Service Bay Plans
57-2-1038	1-00184-DE-07311-0014-0001_01	Intake and Service Bay Longitudinal Sections
57-2-1039	1-00184-DE-07311-0015-0001_01	Powerhouse and Service Bay Longitudinal Section at Centerline Units
57-2-1040	1-00184-DE-07311-0016-0001_01	Powerhouse and Service Bay Longitudinal Section Through Dewatering Galley
57-2-1041	1-00184-DE-07311-0017-0001_01	Spillway and Non-Overflow Dam Plan and Sections
57-2-1042	1-00184-DE-07311-0018-0001_01	Walls, Diesel Generator Room & South Transition Structure Plan and Sections
57-2-1044	1-00184-DE-07311-0019-0001_01	Earth and Rock Fill Structures Sections
57-2-1043	1-00184-DE-07311-0020-0001_01	Spillway Approach and Discharge Channels Sections
57-2-1045	1-00184-DE-07311-0021-0001_01	Upstream Channel Improvements Plan and Sections
	1-00184-DE-22000-0003-0008_06	Intake, Powerhouse & Tailrace General Arrangement
	1-00184-DE-22000-0003-0014_04	Intake, Powerhouse & Tailrace General Arrangement

Appendix D List of Final Construction and Licence Plans

Appendix E: Request for Final Licence



2015 06 03

Mr. Bruce Gray Assistant Deputy Minister Water Stewardship and Biodiversity Division Manitoba Conservation and Water Stewardship Box 80, 200 Saulteaux Crescent Winnipeg MB R3J 3W3

Dear Mr. Gray:

RE: WUSKWATIM GENERATING STATION WATER POWER ACT LICENCE

5022649 Manitoba Ltd. hereby requests a Final Licence for Wuskwatim Generating Station under the provisions of Water Power Regulation being Manitoba Regulation 25/88R. Subsection 43(1) of this Regulation and condition 7.1 of the Interim Licence provide for the issuance of a Final Licence upon completion of the project and observance of the Interim Licence conditions.

The Wuskwatim Generating Station was constructed under the authority of an Interim Water Power Act Licence issued to 5022649 Manitoba Ltd. on behalf of the Wuskwatim Power Limited Partnership (WPLP) on July 10, 2006. WPLP is a legal entity involving Nisichawayasihk Cree Nation (NCN) and Manitoba Hydro. Manitoba Hydro operates the station as part of the Manitoba power grid on behalf of WPLP.

Completion of the Wuskwatim project occurred on October 6, 2012 with the commissioning and release of the final generating unit for commercial use. On behalf of WPLP, Manitoba Hydro has been operating the Wuskwatim Generating Station in accordance with the Interim Licence and has fulfilled all the requirements necessary for the issuance of a Final Licence.

The Wuskwatim Generating Station is not only the first in Manitoba to be constructed in partnership with a First Nation, but also the first in Manitoba to have undergone comprehensive federal and provincial regulatory reviews resulting in Section 35 consultation under the Constitution Act, and an Environmental Act licence. In addition to these processes, Manitoba Hydro and NCN developed a Public Involvement Plan (PIP) which included open houses, newsletters, workshops, meetings with resources users, and negotiations with community leaders and stakeholders. The PIP was implemented between 2001 and 2004 and overlapped the federal-provincial Section 35 consultation process between 2003 and 2005, and the Clean Environment Commission's (CEC) public hearing process from 2003 to 2004.

Wuskwatim Power Limited Partnership, 360 Portage Avenue, PO Box 815, Stn. Main, Winnipeg, Manitoba R3C 2P4

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Mr. Bruce Gray 2015 06 03 Page 2

The CEC public hearing involved twelve participants as well as the public. All required federal and provincial authorizations for the Wuskwatim Generating Station were issued prior to project construction in 2006.

NCN and Manitoba Hydro worked together in planning the Wuskwatim Generating Station. This included negotiating key aspects such as choice of a low head design for the generating station, joint selection of an Environmental Management Team to undertake an Environmental Impact Assessment, design, implementation and review of environmental impact assessment studies, as well as development and implementation of the joint PIP. Consultations with NCN members have occurred on all aspects of the project located within the Nelson House Resource Management Area (RMA), including assessment of alternative road and construction camp locations and those portions of the transmission lines located principally within the Nelson House RMA. NCN members have played key roles in gathering field information and providing Aboriginal Traditional Knowledge to the studies conducted for the project.

WPLP established the Monitoring Advisory Committee (MAC) consisting of representatives from Manitoba Hydro and NCN to provide NCN with an additional opportunity to receive project related monitoring information and to provide input into monitoring activities. The committee commenced its bi-monthly meetings in the fall of 2006 and is currently meeting quarterly. The committee will continue to oversee monitoring and assessment of environmental impacts for the duration of the project's life. Thus far, environmental monitoring has confirmed no unanticipated environmental effects during project construction with monitoring of the operations phase still continuing. Project rehabilitation plans are near completion and aquatic mitigation works are completed and are being monitored for ongoing success.

The attached document provides additional information pursuant to Sections 44 and 45 of Water Power Regulation 25/88R. A detailed report in support of request for a final licence will be prepared in consultation with the Water Use Licensing section and submitted at a later time. This report will provide details regarding compliance with the terms and conditions of the interim licence and the Water Power Regulation to assist the minister responsible for the Water Power Act.

Should you have any inquires on this matter or additional process requirements, please contact Wes Penner, Manager, Hydraulic Operations Department at 204-360-3018.

Yours truly, Original signed by, Lorne Midford

Lorne Midford Chair of the General Partner of Wuskwatim Power Limited Partnership 5022649 Manitoba Ltd.

LEM/jr Att.

REQUEST BY 5022649 MANITOBA LTD. FOR A FINAL LICENCE UNDER THE WATER POWER ACT FOR THE DEVELOPMENT OF WATER POWER AT THE WUSKWATIM SITE, BURNTWOOD RIVER

June 2015

SUBMITTED TO: WATER STEWARDSHIP AND BIODIVERSITY DIVISION MANITOBA CONSERVATION & WATER STEWARDSHIP

5022649 Manitoba Ltd. on behalf of Wuskwatim Power Limited Partnership (WPLP) hereby requests a Final Licence for the development of water power at the Wuskwatim site on the Burntwood River. This request is made under the provision of Section 43(1) of Water Power Regulation 25/88R. This section in part states, "Upon the completion of the initial development ...the interim licensee shall be entitled to a final licence..." The initial development was completed on June 22nd, 2012 with the first of three units being placed into commercial service. The undertaking was completed on October 6, 2012.

The Wuskwatim Generating Station includes a reinforced concrete powerhouse and intake structure, a reinforced concrete spillway, a main earth dam and non-overflow dam, north dyke, transition structures, and all necessary machinery and equipment for the development, generation, transformation and transmission of electric power for industrial and general purposes.

The following information is requested under the provisions of Sections 44 and 45 of the Water Power Regulation 25/88R. The particular subsections are noted in italic parenthesis.

- **a.** Name and address of licensee: (44 (a)(i))
 5022649 Manitoba Ltd. on behalf of Wuskwatim Power Limited Partnership
 360 Portage Avenue
 Winnipeg, Manitoba
 R3C 0G8
- **b.** Name and location of power site: (44 (a)(ii)) The name of the power site is known as the Wuskwatim Generating Station. The project generates electricity using the waters of the Burntwood River.

c. Interim Licence authorizing the undertaking: (44 (a)(iii))

The interim licence authorizing the existing works is dated July 10, 2006 and is identified as the "Interim Licence for the Development of Water Power Wuskwatim Site, Burntwood River".

d. Observance of conditions: (44 (a)(iii))

5022649 Manitoba Ltd. submits that it has observed and fulfilled all the requirements necessary for the issuance of a Final Licence. A report will be prepared to support this statement.

e. The maximum flow or quantity of water which may be diverted (44 (b)) The maximum flow or quantity of water diverted for generation is 1,100 cms or 38,800 cfs.

f. Maximum Permissible Storage (44 (b))

The maximum permissible storage of water as stated in Article 4.2 of the Interim Licence is 234.0 meters ASL (approximately 767.7 feet), as measured on Wuskwatim Lake, except with prior written permission of the Minister. Detailed interpretation

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and compliance with the maximum permissible water level is defined in Section 4.1 of the Wuskwatim Generating Station Licence Implementation Guide for Water Levels 2007, prepared in accordance with Article 10.2 of the Interim Licence and reviewed and accepted by Manitoba Conservation and Water Stewardship in November 2013.

g. Position and Extent of Works: (44 (c))

Lands of the Province required for entering, occupation, maintenance and operation of the undertaking are broadly described as located along the Burntwood River, from Early Morning Rapids to approximately 2.5 km downstream of Taskinigup Falls.

h. Place of Diversion (44 (c)(i))

Water is impounded above, and diverted and used at this hydro-electric station on the Burntwood River located at approximately latitude 55°32'29'' and longitude 98°30'14'', Section 33, Township 75, Range 7 West of the Principal meridian. The water is returned at the same place within the natural river channel.

- i. Principal Works (44 (c)(ii))
 - A reinforced concrete Powerhouse containing three (3) turbines and generators, intake structure with south transition structure and a service bay for hydro-electric generation purposes. The powerhouse capacity is 209.1MW or about 280,400 HP.
 - A reinforced concrete overflow Spillway with three (3) gates located on the north side of the Powerhouse between the North Dyke and the concrete Non-Overflow Dam.
 - 3) Connecting the north end of the spillway and the north bank of the river is the North Dyke. The North Dyke is a zoned earth and rockfill embankment which also provides a storage area for the Spillway stoplogs.
 - 4) The Main Dam connects the south end of the Powerhouse and the south bank of the river. The main dam is a zoned earth and rockfill embankment.
 - 5) A concrete Non-Overflow Dam links the powerhouse and the spillway and provides access from the North Dyke to the crest of the Main Dam.
 - 6) The Excavated Materials Placement Area located on the north river bank between Wuskwatim Lake and Wuskwatim Generating Station, consists of excavated earthfill material from construction activities, and acts together with the above works to contain the immediate forebay area.
 - Channel excavations at the outlet of Wuskwatim Lake have improved the lake's outflow conditions and increased the station's efficiency.

j. Description of Lands Required: (44 (d))

The lands required will be shown on plans submitted under separate cover.

k. Use of Undertaking: (44 (e))

The purpose of the project is to generate electricity for domestic power requirements and export market opportunities.

1. Rentals: (44 (f))

Water rentals have been paid in accordance with Section 48 of the Regulation. WPLP owns the lands required for the project and therefore land rental payments are not required.

m. Severance line: (44 (g))

The severance line will be determined by mutual agreement in accordance with Section 44 (g) of the Regulation.

n. Term of Licence: (45 (1))

5022649 Manitoba Ltd. requests that the term of this Final Licence be 50 years, as permitted under Article 7.2 (f) of the Interim Licence, and Section 45 of the Regulation. This would result in a Final Licence expiration date of June 22, 2062.

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Appendix F: Guarantee Deposit



Water Stewardship

Executive Director Infrastructure and Operations 200 Saulteaux Crescent, Box 11 Winnipeg MB R3J 3W3 CANADA Phone: (204) 945-7488 Fax: (204) 945-7419

Date: August 22, 2006

File: 53.1.5

RBC Int'l. Trade Centre Manitoba 2nd Floor 220 Portage Avenue WINNIPEG MB R3C 3A6

.

Dear Sir or Madam:

Re: Irrevocable Standby Letter of Credit No. P354259W00367

This is to advise you that Manitoba Water Stewardship has received your letter of credit dated August 3, 2006 for an amount not to exceed \$50,000 which was prepared on behalf of The Wuskwatim Power Limited Partnership. This letter of credit and its attached Schedule "A" will be held in the office of Manitoba Water Stewardship, Contract Management, for safe keeping and future reference.

Yours truly,

OPPONDE SIGNED BY: Steamers OPPING

Steven D. Topping, P. Eng. Executive Director Infrastructure and Operations

cc: K. Adams, 5022649 MB Ltd. B. Walker, Contract Management

DK:cb





ORIGINAL

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INT'L TRADE CENTRE MANITOBA 2ND FLOOR, 220 PORTAGE AVENUE WINNIPEG, MANITOBA R3C 3A6 CANADA

DATE OF ISSUE: AUGUST 3, 2006

OUR REFERENCE NUMBER: P354259W00367

DATE OF EXPIRY: JULY 31, 2007 PLACE OF EXPIRY: TORONTO, ONTARIO

BENEFICIARY: MANITOBA WATER STEWARSHIP CONTRACT MANAGEMENT BOX 55, 200 SAULTEAUX CRESCENT WINNIPEG, MB R3J 3W3 APPLICANT: WUSKWATIM POWER LIMITED PARTNERSHIP PO BOX 815 STN MAIN WINNIPEG, MB R3C 2P4

AMOUNT: CAD 50,000.00 FIFTY THOUSAND AND 00/100'S CANADIAN DOLLARS

IRREVOCABLE STANDBY LETTER OF CREDIT NO. P354259W00367

AT THE REQUEST OF AND FOR THE ACCOUNT OF OUR CUSTOMER THE WUSKWATIM POWER LIMITED PARTNERSHIP (THE "CUSTOMER") WE, THE ROYAL BANK OF CANADA, INTERNATIONAL TRADE CENTRE-MANITOBA, 2ND FLOOR, 220 PORTAGE AVENUE, WINNIPEG, MANITOBA R3C 3A6 (THE "BANK"), HEREBY ISSUE TO AND IN FAVOUR OF MANITOBA WATER STEWARDSHIP OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. P354259W00367 FOR AN AMOUNT NOT TO EXCEED \$50,000.00 IN LAWFUL MONEY OF CANADA, WHICH SUBJECT TO THE TERMS OF THIS LETTER OF CREDIT ARE AVAILABLE TO YOU ON DEMAND FROM TIME TO TIME AND AT ANY TIME AGAINST YOUR DRAFT(S) DRAWN ON OURSELVES AT SIGHT AND ACCOMPANIED BY DRAWING CERTIFICATE(S) IN THE FORM APPENDED HERETO AS SCHEDULE "A" DULY SIGNED AND APPROPRIATELY COMPLETED, ON YOUR PRINTED LETTERHEAD, AND THE ORIGINAL OF THIS STANDBY LETTER OF CREDIT WHICH DEMAND WE SHALL HONOUR WITHOUT INQUIRING



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WHETHER YOU HAVE A RIGHT AS BETWEEN YOURSELF AND THE CUSTOMER TO MAKE SUCH DEMAND AND WITHOUT RECOGNIZING ANY CLAIMS OF THE CUSTOMER OR AVAILABLE TO YOU A ANY TIME AND FROM TIME TO TIME UPON WRITTEN NOTICE FOR PAYMENT BEING MADE UPON US. SUCH DEMAND SHALL STATE THAT SUCH DRAWINGS UNDER THIS LETTER OF CREDIT ARE TO SATISFY UNPERFORMED OBLIGATIONS OF THE CUSTOMER WITH RESPECT TO THE CONSTRUCTION OF THE HYDRO-ELECTRIC GENERATION FACILITY AT THE WUSKWATIM SITE.

EACH SIGHT DRAFT ACCOMPANIED BY SUCH DRAWING CERTIFICATE AND PRESENTED IN FULL COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT WILL BE HONOURED BY OUR PAYMENT OF THE DRAFT AMOUNT IN IMMEDIATELY AVAILABLE FUNDS. IF WE RECEIVE YOUR DRAFT AND SUCH DRAWING CERTIFICATE AT OR BEFORE 12:00 P.M. TORONTO TIME ON A BUSINESS DAY, THEN WE WILL HONOUR YOUR DEMAND FOR PAYMENT NOT LATER THAN THE SECOND BUSINESS DAY FOLLOWING SUCH RECEIPT. IF WE RECEIVE YOUR DRAFT AND SUCH DRAWING CERTIFICATE AFTER 12:00 P.M. TORONTO TIME ON A BUSINESS DAY, THEN WE WILL HONOUR YOUR DEMAND FOR PAYMENT NO LATER THAN THE THIRD BUSINESS DAY FOLLOWING SUCH RECEIPT. "BUSINESS DAY" MEANS ANY DAY OTHER THAN SATURDAY, SUNDAY OR ANY OTHER DAY THAT THE ROYAL BANK OF CANADA IS REQUIRED TO BE CLOSED BY LAW.

UPON RECEIPT OF A DEMAND(S) FOR PAYMENT MADE BY YOU IN THE FORM OF DEMAND APPENDED HERETO AS SCHEDULE "A" THE BANK SHALL, PROVIDED SUCH DEMAND OR DEMANDS ARE IN COMPLIANCE HEREWITH, PAY TO YOU SUCH AMOUNT AS MAY BE SPECIFIED IN SUCH DEMAND OR DEMANDS IN LAWFUL MONEY OF CANADA.

PARTIAL DRAWINGS ARE PERMITTED UNDER THIS LETTER OF CREDIT UP TO THE FULL AMOUNI OF THE LETTER OF CREDIT.

NOTWITHSTANDING ANY REFERENCE IN THIS LETTER OF CREDIT TO OTHER DOCUMENTS, INSTRUMENTS OR AGREEMENTS OR REFERENCES IN SUCH OTHER DOCUMENTS, INSTRUMENTS OR AGREEMENTS TO THIS LETTER OF CREDIT, THIS LETTER OF CREDIT CONTAINS THIS ENTIRE AGREEMENT BETWEEN THE BANK AND THE BENEFICIARY RELATING TO THE OBLIGATIONS OF THE BANK HEREUNDER.

ALL DRAFT(S) MUST BE MARKED ON ITS FACE "DRAWN UNDER ROYAL BANK OF CANADA, INTERNATIONAL TRADE CENTRE-MANITOBA, 2ND FLOOR, 220 PORTAGE AVENUE, WINNIPEG, MANITOBA R3C 3A6 LETTER OF CREDIT NO. P354259W00367 DATED AUGUST 3, 2006".

DRAFT(S) AND DRAWING CERTIFICATE(S) MUST HE PRESENTED AT ROYAL BANK OF CANADA, INTERNATIONAL TRADE CENTRE-ONTARIO, 180 WELLINGTON STREET WEST, 9TH FLOOR, TORONTO, ONTARIO M5J 1J1, ATTENTION: GUARANTEES DEPARTMENT, NOT LATER THAN JULY 31, 2007 AT THE CLOSE OF BUSINESS (OR THIS LETTER OF CREDIT WILL EXPIRE ON JULY



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31, 2007 IF NOT DRAWN UPON US ON OR BEFORE THAT DATE IN ACCORDANCE WITH THE FOREGOING PROVISIONS OF THIS LETTER OF CREDIT).

IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT SHALL BE DEEMED TO BE AUTOMATICALLY EXTENDED, WITHOUT AMENDMENT, FOR ONE YEAR FROM THE PRESENT OR ANY FUTURE EXPIRATION DATE BUT NOT AFTER JULY 30, 2012, UNLESS AT LEAST NINETY (90) DAYS PRIOR TO ANY SUCH DATE, WE SHALL NOTIFY YOU IN WRITING, BY CERTIFIED MAIL OR COURIER, THAT WE ELECT NOT TO CONSIDER THIS LETTER OF CREDIT RENEWED FOR ANY SUCH ADDITIONAL PERIOD.

THIS LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1993 REVISION), INTERNATIONAL CHAMBER OF COM#MERCE, PUBLICATION NO. 500. NOTWITHSTANDING ARTICLE 17 OF THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS, IF THIS LETTER OF CREDIT EXPIRES DURING AN INTERRUPTION OF BUSINESS AS DESCRIBED IN ARTICLE 17, THE BANK HEREBY SPECIFICALLY AGREES TO EFFECT PAYMENT IF THE LETTER IS DRAWN AGAINST IT WITHIN TEN DAYS AFTER RESUMPTION OF OUR BUSINESS. THIS LETTER OF CREDIT ALSO SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE PROVINCE OF MANITOBA AND THE APPLICABLE LAWS OF CANADA EXCEPT TO THE EXTENT THAT SUCH LAWS ARE INCONSISTENT WITH THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS.

ROYAL BANK OF CANADA

Original signed by, A. Pereira

AUTHORIZED SIGNATURE

Original signed by, B. Kingramdin

AUTHORIZED SIGNATURE

A. PEREIRA

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ORIGINAL

P354259W00367 PAGE: 4

SCHEDULE "A"

TO: ROYAL BANK OF CANADA INTERNATIONAL TRADE CENTRE-ONTARIO 180 WELLINGTON STREET WEST, 9TH FLOOR TORONTO, ONTARIO M5J 1J1

ATTENTION: GUARANTEES DEPARTMENT

DEAR

THE UNDERSIGNED REFERS TO YOUR LETTER OF CREDIT NO. P354259W00367 ISSUED BY YOU IN RESPECT OF THE WUSKWATIM POWER LIMITED PARTNERSHIP AND BEARING ISSUE DATE AUC UST 3, 2006 AND MAKES DEMAND IN THE AGGREGATE AMOUNT OF \$______ IN Li WFUL MONEY OF CANADA. THE UNDERSIGNED CERTIFIES THAT:

(A) SUCH AMOUNT IS BEING DEMANDED PURSUANT TO THE TERMS OF WATER POWER REGUI N 25/88 AND ALL AMENDMENTS THERETO AS PASSED IN ACCORDANCE WITH THE PROVISIONS (F THE WATER POWER ACT, C.C.S.M. C. W70, AND ALL AMENDMENTS THERETO; AND

(B) THE PERSONS WHOSE NAMES APPEAR BELOW ARE DULY AUTHORIZED SIGNING OFFICER MANITOBA WATER STEWARDSHIP FOR THE PURPOSE OF MAKING THIS DEMAND.

DATED THIS DAY OF

, 200 .

[SIGNATURE OF BENEFICIARY]