

HYDRAULIC OPERATIONS DEPARTMENT
POWER SALES & OPERATIONS DIVISION
GENERATION OPERATIONS

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

Original Signed By: B.W. Giesbrecht



IMPORTANT

THIS MATERIAL IS THE EXCLUSIVE PROPERTY
OF MANITOBA HYDRO AND ALL RIGHTS ARE
RESERVED. ANY RELEASE, REPRODUCTION OR
OTHER USE THEREOF, WITHOUT THE EXPRESS
WRITTEN CONSENT OF MANITOBA HYDRO, IS
STRICTLY PROHIBITED.

DISTRIBUTION:

R. MATTHEWS (MANITOBA CONSERVATION & WATER STEWARDSHIP)
CORPORATE LIBRARY (2 Copies)
LAW DEPARTMENT (2 Copies)

PREPARED BY: *Original Signed By: H.J. Epp*
H.J. ÉPP //
Original Signed By: P.G. Chanel
P.G. CHANEL
Original Signed By: G.K. North
G.K. NORTH
Original Signed By: B.W. Giesbrecht
REVIEWED BY: B.W. GIESBRECHT
Original Signed By: W.V. Penner
APPROVED BY: W.V. PENNER
DATE: 2015 - 12 - 02
REPORT NO: PS&O 15/10



Executive Summary

This document provides supporting documentation that Manitoba Hydro is entitled to a Final Licence for the Jenpeg Generating Station pursuant to section 43(1) of the Water Power Regulation 25/88R. Details are included on the observances of all the terms and conditions under the Interim Licence and its subsequent authorizations as well as Regulation 25/88R pursuant to *The Water Power Act*. The documentation is provided to assist the minister responsible for *The Water Power Act* in the issuance of a Final Licence for Jenpeg Generating Station. Manitoba Hydro requested a Final Licence in writing on January 12, 1998.

The Jenpeg Generating Station was constructed under the authority of an Interim *Water Power Act* Licence issued on December 14, 1972. All six units were in commercial service on November 13, 1979. The project has been operated in accordance with this licence. The five year term to complete the construction of the project by December 14, 1977 was extended to December 14, 1979.

The Jenpeg Generation Station provides the ability to generate electrical energy and in coordination with Lake Winnipeg Regulation project, provides a limited ability to regulate flows out of Lake Winnipeg.

Section 1 of this document provides an overview of the project. This includes information about the physical works and the operating conditions. It also includes information about Manitoba Hydro's community programming in the surrounding areas.

Section 2 of this document shows how Manitoba Hydro has fulfilled specific terms of these licences.

Section 3 of this report demonstrates how Manitoba Hydro has fulfilled the sections of Regulation 25/88R pursuant to *The Water Power Act* that are pertinent to an Interim Licensee and which require a statement indicating observance. The sections deemed to be pertinent was done in consultation with Manitoba Conservation and Water Stewardship.

Manitoba Hydro is committed to its relationship with First Nations, other Aboriginal communities, other Manitobans and resource user groups affected by this project. Efforts include entering into formalized agreements to address adverse effects and a wide-range of activities and programs associated with resource harvesting, recreation, heritage resources, safe waterway travel, employment and training. Manitoba Hydro provides information about flows and levels at and near the Jenpeg Generating Station to First Nations, communities and resource user groups along the Nelson River waterways.

Table of Contents

	Page
List of Figures	4
Section 1 – Introduction	5
Section 2 – Observance of Licence Conditions	7
Section 3 – Observance of Pertinent Water Power Act Regulation Articles	15
Appendix A Reference Correspondence	34
Appendix B Notification and Determination of Project Completion Documents Including Records of Transmittal	54
Appendix C List of Final Construction Plans	67

List of Figures

Figure		Page
1	Jenpeg Generating Station – Location Plan	28
2	Jenpeg Generating Station – Photo	29
3	Sample of Daily Data	30
4	Screen Display of Stored Program Process Computer	31
5	Forebay Still-well Gauge	31
6	Tailrace Still-well Gauge	32
7	Control Room Digital Display of Forebay, Tailrace and Spillway Gate Positions	32

Section 1 – Introduction

The Jenpeg Generating Station (GS) is situated on the Nelson River and was authorized by an Interim Licence issued under *The Water Power Act* and Regulation on December 14, 1972.

Much of the surrounding construction related to Lake Winnipeg Regulation was underway when the Jenpeg Interim Licence was issued. The powerhouse was constructed with the first unit in place by June 28, 1977. Several factors caused the installation and commissioning of the remaining units to be delayed until November 1979.

Physical Works

The principal physical works is the Jenpeg Generating Station situated adjacent to the Jenpeg control structure (spillway) and headblock. The generating station houses six turbines and generators with a collective nameplate rating of 233,340 horsepower. The unit in-service dates are listed in Section 2, under licence term #5.

Some other components that have been mutually ascribed as being associated with the Jenpeg GS are the switchyard, aerodrome (airstrip), sewage lagoon, staff house and main dam. The general location and a photo of the Jenpeg Generating Station are shown on Figures 1 and 2.

Community Involvement

There are a total of six First Nations and six Northern Affairs Communities (NACs) located downstream from Lake Winnipeg that have been identified as being most directly affected by the Jenpeg GS and Lake Winnipeg Regulation (Jenpeg and LWR). The impacts experienced by each of the communities listed below vary in extent and nature.

First Nations

- Norway House Cree Nation (NHCN)
- Cross Lake First Nation (CLFN)
- York Factory First Nation (YFFN)
- Tataskweyak Cree Nation (TCN)
- War Lake First Nation (WLFN)
- Fox Lake Cree Nation (FLCN)

Northern Affairs Communities

- Norway House
- Cross Lake
- Wabowden
- Pikwitonei
- Ilford
- Thicket Portage

In an effort to resolve historic grievances, Manitoba Hydro has participated in various settlement processes. These include the Northern Flood Agreement (NFA), Comprehensive Implementation Agreements (CIAs), ongoing NFA implementation at CLFN, and other settlement agreements. In addition to these settlement arrangements, Manitoba Hydro has entered into individual settlements for personal property loss and damage. Manitoba and Manitoba Hydro signed a relationship building agreement with the Manitoba Métis Federation regarding their concerns relating to Manitoba Hydro's past developments, support for current projects and future engagement processes.

Corporate programs are implemented throughout the affected waterways aimed at addressing environmental, transportation safety, as well as cultural and heritage effects. They include the Waterways Management Program, the Coordinated Aquatic Monitoring Program (CAMP), Water Level Forecast Notices, and archaeological programming. Additional programming is implemented as appropriate with individual communities.

Manitoba Hydro continues to work towards long-term relationships with downstream First Nations, communities and resource user groups along affected waterways. Manitoba Hydro continues to engage with these First Nations, communities and resource user groups and has initiated additional public participation efforts with First Nations and communities adjacent to Lake Winnipeg and with Jenpeg and LWR stakeholders in general.

Manitoba Hydro also collaborated with Cross Lake over a number of years to develop the weir which was built in 1991 at a cost of \$9.5 million to mitigate the water level effects of Jenpeg and LWR on Cross Lake.

Cumulative Effects

Manitoba Hydro and Manitoba are anticipating completing the Phase II Regional Cumulative Effects Assessment (RCEA) report for December 31, 2015. The RCEA of existing hydroelectric developments is retrospective in nature and will assess environmental change (quantitative and qualitative) and socio-economic effects over time in main areas directly affected by Lake Winnipeg Regulation (LWR), Churchill River Diversion (CRD) and associated transmission projects. The Jenpeg GS is included within the RCEA area.

Report Overview

The remaining part of this document provides details on how Manitoba Hydro fulfilled its obligations with respect to the Interim Licence and Regulation 25/88R pursuant to *The Water Power Act* and Regulation.

Section 2 demonstrates how Manitoba Hydro has fulfilled specific terms of this Interim Licence.

Section 3 demonstrates how Manitoba Hydro has fulfilled the articles of Regulation 25/88R pursuant to *The Water Power Act* that are pertinent to an Interim Licensee and which require a statement indicating observance.

Section 2 – Observance of Licence Conditions

This section of the report provides an evaluation of the observance of the Interim Licence on a term by term basis.

1) **General Construction Plans**

Licence Term

The Licensee shall file the general construction plans of the undertaking authorized hereby with the Director in such form and detail as is required by the Regulations within three (3) months from the date of this Interim License.

Observance

At the time of this report, a record of correspondence confirming this filing has not been located.

2) **Licence Term**

After the general construction plans have been approved, the Licensee shall begin the construction of the undertaking authorized hereby within the time limit provided in the Regulations, and shall thereafter without interruption, except such as may be occasioned by act of God or other major cause beyond the control of the said Licensee (other than want of funds), carry on and complete the construction of the said undertaking according to the plans so approved or as the same may be amended or modified at the direction and with approval of the Minister during the progress of construction, and subject to the terms of this Interim License and of the Regulations.

Observance

Construction of the project commenced following the issuance of the Interim Licence. Work continued with the last generating unit commissioned on November 1, 1979.

3) **Project Lands**

Licence Term

Subject to Article 1 hereof, 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 provided that, when so requested in writing by the Director, following completion of the works and the commencement of the production of power, the Licensee shall cause a survey to be made and a plan prepared by a Manitoba Land Surveyor showing in detail the lands required to be occupied for the works. Such survey shall be limited to include only such areas for the said purpose as the Director may approve and shall be prepared in accordance with Section 24 of the Regulations.

Observance

Manitoba Hydro has no record of a request by the Director for a survey to be made or a plan to be prepared. A new severance line plan defining the lands required for the project will be prepared pursuant to Section 44 (g) of the Water Power Regulation. The new severance line

will encompass the works required for the project. The licence area under the interim licence is shown on plan 39-3-1020, Manitoba Hydro drawing number 0198-D-0203 (Rev. 0).

4) **Completion time**

Licence Term

Within five (5) years from the date of this Interim License, the Licensee shall have satisfactorily completed the undertaking and shall have installed all the machinery and equipment required for an initial development of up to six turbine generator units having a total capacity of not less than two hundred and twenty thousand (220,000) horsepower, measured on the turbine shaft, and shall be in a position to apply the power to beneficial use.

Observance

After the five-year term for completion ended on December 14, 1977, Manitoba Hydro requested an extension of time by letter dated March 10, 1978 with a follow-up letter dated July 7, 1978. The March letter outlined the main contributing factors for the delay in completing the initial development. Order-In-Council 812/1979 was granted on August 21, 1979 and allowed for the project to be completed by December 14, 1979. All six units were completed by March 18, 1979.

Copies of the March 10, 1978 letter, the July 7, 1978 letter and the Order-In-Council can be found in Appendix A.

5) **Notification of Completion**

Licence Term

The Licensee shall notify the Director in writing of the commissioning date of each unit within 30 days of commissioning, and shall also notify the Director in writing when the initial development is completed. The Director shall, in accordance with the provisions of Subsection (4) of Section 42 of the Regulations, determine a date which, for the purpose of the Interim License and Regulations, shall be the date of completion of the initial development and shall be the earlier of:

- (a) the date on which all of the turbine generator units comprising the initial development have been commissioned; or*
- (b) the date fixed in Article 4 hereof as the limiting date by which the initial development is to be completed, whether the same shall have been completed or not.*

Observance

Documentation that Manitoba Hydro provided written notification of completion to the province has been located with the exception of the initial unit. All available references can be found in Appendix A.

Table 1: Completion of unit notification dates

Unit	Date of completion (year, month, day)	Date of notification	Days from completion to notification
1	1979 11 01	1979 11 13	12
2	1979 03 18	1979 03 28	10
3	1978 12 12	1978 12 13	1
4	1978 09 28	1978 10 06	8
5	1978 04 29	1978 05 09	10
6	1977 06 28	The letter of notification has not been located, though it is clear by two pieces of correspondence that the province was informed. On 1978 02 28, the province issued an invoice for land and water rentals. A 1978 03 10 letter indicates that the province was aware of this.	

Copies of the letters of notification along with the February 28, 1978 letter can be found in Appendix B. The March 10, 1978 letter can be found in Appendix A.

6) **Licence Execution**

Licence Term

The Licensee may divert and use continuously for the development of power at the said Jenpeg site all the water of the West Channel of the Nelson River which may be flowing at the said site from time to time during the term of this Interim License, subject, however, to the provisions of Section 72 of the Regulations:

Observance

Manitoba Hydro attempts to maximize the use of the water resource for power production purposes. Jenpeg Generating Station is operated as part of the Lake Winnipeg Regulation project. Power production is therefore optimized with respect to generating stations downstream and when possible to maximize the potential at the Jenpeg Generating Station.

7) **Land Rentals**

Licence Term

On the second day of January in each and every year during the term of this Interim License, the Licensee shall pay an annual rental in advance of five hundred dollars (\$500.00) for the use and occupation of those lands of the Province described in Article 3 hereof. The first payment of such rental shall be made on the second day of January following the date of completion of the initial development as determined by the Director under Article 5 hereof. Such 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 said date of completion of the initial development and the end of the year, together with the amount due in advance for the current year.

Observance

Land rentals were paid from 1977 and continue to be paid as required. In 1977 the prorated amount was \$23.29. From 1978 to 1995 the amount was \$500 per year.

Since 1996, land rentals have been paid on a rate per acre basis. This change came into effect on October 15, 1995 by Order-in-Council 597/1995. The initial rate applicable to Jenpeg was set at \$1.00 per acre. From 1996 to 2010 the amount paid was \$111.20 per annum.

On November 4, 1996 the Deputy Minister of Natural Resources gave notice that land rentals would be payable on a fiscal year basis beginning 1997/1998. He also advised that a transition invoice would be issued for the months of January to March 1997.

Order-In-Council 77/2010 amended the land rental rate to \$1.80 per acre effective April 1, 2010. Manitoba Hydro has accordingly increased its annual payment of land rentals to \$200.10 in compliance with this rate since then.

Copies of Order-in-Council 597/1995, the November 4, 1996 letter and Order-In-Council 201/2010 can be found in Appendix A.

8) **Water Rentals After Completion of Development**

Licence Term

From the date of completion of the initial development determined in accordance with Article 5 hereof, and during the remaining term of this Interim License, the Licensee shall pay annually, in arrears, as rental for water used in the development of power, an amount determined in accordance with the principles set out in Section 48 of the Regulations, being whichever is the greater of:

- a) *A rental at the rate of fifty (50) cents per installed horsepower of turbine capacity, based on the initial development of not less than 220,000 horsepower; or*
- b) *A rental at the rate of one dollar and twenty-five cents (\$1.25) per horsepower-year of output measured on the turbine shaft, such output to be calculated in the manner provided in Subsection (9) of Section 48, of the Regulations.*

The first payment of annual water rental is to be for that part of the year between the date of completion of the initial development determined in accordance with Article 5 hereof, and the end of the then current calendar year. Subsequent payments are to be for each successive calendar year, or part thereof, during which the Licensee continues operations. In each case the Licensee shall, on or before the first day of March in each year following any calendar year for which rental is payable, submit all data required by the Director for the determination of its rental for the preceding calendar year. The Director shall thereupon prepare and submit to the Licensee a statement of the rental due. Payment shall be made within sixty (60) days of submission of the said statements; otherwise the penalties provided in Subsections (4) and (6) inclusive of Section 48 of the Regulations shall apply.

Observance

Manitoba Hydro paid power rentals commencing from the date of the initial development on June 28, 1977. The amount paid has always been based on the Regulation then in force. Except for 2010 and 2014, the greater amount payable has been on a horsepower-year output basis.

Until 1995 Manitoba Hydro submitted all data required for the determination of its rental for the preceding calendar year. The Deputy Minister of Natural Resources notified Manitoba Hydro on February 29, 1996 of a change in billing practice. The notification outlined that an invoice would be issued for the months of January to April of 1996 and thereafter billing would be on a monthly basis. Since then, Manitoba Hydro has submitted data and subsequent payments of rentals as required under this billing practice.

A copy of the February 29, 1996 letter can be found in Appendix A.

Water rental rates were amended June 1, 1980 and several times since then. The current rate, which was effective April 1, 2001, is the greater is \$20.32 per horsepower-year of generation or \$8.13 per installed horsepower. Manitoba Hydro has paid water rentals based on the applicable rate in force at the time.

9) Water Rentals During Initial Development

Licence Term

Notwithstanding Article 8 hereof, if the Licensee commences the generation and transmission of power prior to the date fixed for completion of the initial development in accordance with Article 5 hereof, by and from any turbine generator unit commissioned prior to the said date, the Licensee shall pay annually, in arrears, for the water used in the development of power a rental at the rate of one dollar and twenty-five cents (\$1.25) per horsepower-year of output measured on the turbine shaft, such output to be calculated in the manner provided in Subsection (9) of Section 48, of the Regulations. The first payment of annual water rental for each turbine generator unit is to be for that part of the year between the date of commissioning of each turbine generator unit, or a date fixed by the Lieutenant Governor in Council, whichever is the earlier, and the end of the then calendar year. Subsequent payments are to be for each successive calendar year, or part thereof until the date of completion of the initial development determined in accordance with Article 5 hereof. In each case the Licensee shall, on or before the first day of March in each year following any calendar year for which rental is payable, submit all data required by the Director for the determination of the rental for the preceding calendar year. The Director shall thereupon prepare and submit to the Licensee a statement of the rental due. Payment shall be made within sixty (60) days of submission of the said statements.

Observance

This licence term excludes the higher minimum water rental rate from coming into effect for the year in which a unit is initially commissioned. This was the case for the year 1977 in which the initial unit (Unit #6) was commissioned on June 28 of that year. In 1978 an additional three units were installed and by November 13, 1979 all six units were in service. During the construction period the water rental rate remained at \$1.25 per horsepower-year.

10) Licence Plans

Licence Term

The plans filed by the Licensee and made a part of this Interim License are as follows:

Manitoba Water Resources Branch File Number	Licensee's File Number	Description
39-3-1019	0198-D-0202 (Rev. 0)	Location general arrangement and cross-sections of Development
39-3-1020	0198-D-0203 (Rev. 0)	Plan showing Severance Line for Generating Station

Observance

No statement is required by Manitoba Hydro.

11) **Final Licence**

Licence Term

Upon the satisfactory completion by the Licensee of the initial development in accordance with Article 4 hereof and upon the due observance and fulfilment by it of all the terms and conditions required by this Interim License and under the Regulations to be by it observed and fulfilled, the Minister shall and will issue in favour of the Licensee a Final License for the use of water, for the development of energy therefrom, for the utilization of such energy, and for the use or occupation of those lands of the Province which, in the Minister's opinion, are required for the proper operation and maintenance of the works authorized. The said Final License shall be issued subject to the regulations then in force and shall embody such matters as the Minister may determine in accordance with the Regulations, and the following terms and conditions, namely:

- a) The Licensee may divert and use continuously for the development of power at the said Jenpeg site all the water of the West Channel of the Nelson River which may be flowing at the said site from time to time during the term of this Final License, subject, however, to the provisions of Section 72 of the Regulations.*
- b) The Licensee shall, during the term of the Final License pay annually in advance on the second day of January in each year an annual rental of five hundred dollars (\$500.00) for those lands of the Province to be described in the Final License, and used for the purposes described in Article 3 of the Interim License.*
- c) The Licensee shall also pay an annual rental during the term of the Final License for the use of water for the development of power, determined in accordance with the principles set out in Section 48 of the Regulations and payable at the times and in the manner therein provided, and at the following rates:
 - i) The rentals in the twenty-year period directly following the date of completion of the initial development determined in accordance with Article 5 hereof shall be the greater of:
 - (a) An annual rental of fifty (50) cents per installed horsepower;*
 - (b) An annual rental of one dollar and twenty-five cents (\$1.25) per horsepower year.**
 - ii) The annual rental to be paid after the expiry of the said twenty-year period shall be determined as provided in the regulations in force at such time.**
- d) The undertaking in respect of which the Final License is to be issued is to comprise: a reinforced concrete powerhouse with up to six turbine generator units, having a total capacity of not less than 220,000 horsepower; and all plant machinery and equipment requisite for the complete development and utilization of the power economically available at the said Jenpeg site, together with such other approved works as have been constructed for purposes of the undertaking for which the Final License is to be issued.*
- e) The energy developed under the said Final License may be generated, transmitted, sold and delivered for the purposes and within the area permitted by the Act.*
- f) In accordance with Section 45 of the Regulations the term of the Final License shall be fifty (50) years from and after the date fixed in accordance with Article 5 of the Interim License for the completion of the initial development and shall be subject to renewal or extension in accordance with the provisions of the Laws and Regulations relating thereto and then in force.*

g) *The Severance Line as defined in Section 1 of the Regulations shall be as shown in red and marked "Severance Line" upon record plan No. 39-3-1020 (Manitoba Hydro No. 0198-D-0203 (Rev. 0) on file in the office of the Director.*

Observance

This report is provided to demonstrate that Manitoba Hydro has observed and fulfilled all the terms and conditions of this Interim Licence. Manitoba Hydro requested a Final Licence on January 12, 1998.

12) **Plans Part of the Licence**

Licence Term

All record plans filed with the Director and referred to in this Interim License is issued upon the express condition that it shall be subject to the provisions of the Regulations and all amendments thereto.

Observance

No statement is required by Manitoba Hydro.

13) **Licence Subject to Regulations**

Licence Term

This Interim Licence is issued upon the express condition that it shall be subject to the provisions of the Regulations and all amendments thereto.

Observance

Manitoba Hydro's adherence with the Regulations is addressed in Section 3 of this report.

Section 3 - Observance of Pertinent Water Power Act Regulation Articles

This purpose of this section is to demonstrate that Manitoba Hydro has fulfilled its obligations under Regulation 25/88R pursuant to *The Water Power Act*. Manitoba Water Stewardship and Manitoba Hydro have jointly selected those articles of the Regulation that are pertinent to this Interim Licence. Each of the pertinent articles is shown in italics followed by a statement how Manitoba Hydro has fulfilled its obligations.

Definitions

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 a Geodetic Survey of Canada (GS of C) datum, which in turn use mean sea level as a reference. Although plans may not specifically reference the relationship to a datum, the elevations shown are based on the datum known as the Jenpeg Datum.

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.*

Observance

Documentation indicating the filing of plans with the director has not been located at the time of this report.

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.*

Observance

A detailed list of the final construction plans can be found in Appendix C.

35(3) *The said plans shall be on tracing film, and shall conform to the sizes specified in clause 3(1); 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.*

Observance

Drawings have been submitted in more modern media. All drawings submitted under 35(2) are signed and/or sealed by a professional engineer registered to practice in Manitoba.

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

Manitoba Hydro has provided all the requisite plans under this section.

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.*

Observance

Manitoba Hydro has determined that the capital cost of the project is \$234.6 million as of 2014 as outlined in a December 12, 2014 letter. A copy of this letter can be found in Appendix B.

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

Manitoba Hydro has determined the capital cost of the project.

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

Manitoba Hydro has not been notified of any maintenance and operation issues. The minister has not requested that the project be operated beyond the conditions stated in the Interim Licence and those granted at Manitoba Hydro's request. Observation of this Regulation was addressed in Section 2 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 this Article was addressed in Condition 10, Section 2.

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

Manitoba Hydro has observed and complied with all the provisions of this Regulation as would be applicable to final licensees.

Extension of time

40(1) *Notwithstanding section 39, no extension of the time fixed in any interim licence for the filing of the general construction plans, or for the commencement of construction, or for the expenditure of the sums required to be expended within any stated period, or for the completion of the initial development, may be granted to any interim licensee unless the minister is satisfied, after report in writing from the director, that the interim licensee has been prevented by engineering difficulties that could not reasonably have been foreseen or by other peculiar and special causes beyond his or her control other than the want of funds, from completing the said requirement within the time stated, and then only upon the passage of an order by the Lieutenant Governor in Council approving of the said extension.*

Observance

Observation of this Article was addressed in licence condition #4, Section 2.

Completion of works by Interim Licensee

42(1) *As soon as the interim licensee has completed the initial development and otherwise fulfilled the terms of the interim licence, he or she shall file in the office of the director written notice of such completion and fulfillment in the form supplied by the director.*

Observance

The letter of notification has not been located, though it is clear by the following two pieces of correspondence that the province was informed. Firstly, on February 28, 1978, the province issued an invoice for land and water rentals. Secondly, a March 10, 1978 letter indicates that the province was aware of the completion of the initial development. Furthermore, in a November 13, 1979 letter Mr. W. Tishinski advised Mr. T. E. Weber, Senior Assistant Deputy Minister, that Manitoba Hydro has “duly observed and fulfilled all the terms and conditions required by the Interim Licence and under the Regulations”. It is therefore believed that a written notice was filed, but has not yet been located.

A copy of these references can be found in Appendix A and B.

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

Manitoba Hydro has been unable to locate a letter from the director that determined the completion date of the initial development for licence and regulation purposes.

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

Manitoba Hydro has taken the necessary steps to fulfill all the terms and conditions required to obtain the final licence. Section 2 and Section 3 of this document describe how Manitoba Hydro has undertaken to fulfill all the requirements of the licence conditions and relevant articles of the Regulation. Manitoba Hydro and Manitoba Conservation and Water Stewardship are working cooperatively, pursuant to Article 44(g), to establish a suitable severance line for the project.

Licence rentals

48(1) *Subject to subsection (2), rentals are payable under this section from the date fixed in the original interim licence for the completion of the initial development, whether or not it is completed.*

Observance

Manitoba Hydro has paid land and water rentals in accordance with Interim Licence terms 7 and 8. The amounts payable have been amended since the issuance of the Interim Licence. See Articles 7 and 8 of Section 2 for an explanation of observance.

Extension granted by minister

48(2) If the minister grants an extension of time under section 40 for the completion of the initial development, the minister may defer the commencement of the rentals payable under this section until the date fixed by the minister under the extension so granted.

Observance

The latest date on which the initial development was to be completed as outlined in licence term 4 was December 14, 1977. As the first unit (Unit #6) was released for commercial service on June 28, 1977, water rentals were paid for the generation since then. Though an extension of time was granted for the completion of the development, the minister did not need to defer the commencement of water rental payments.

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

Water use rentals have been paid for the period since completion of the initial development. From the commencement of the project to 1995, water rental data was submitted and paid for on

a calendar year basis. The Deputy Minister of Natural Resources notified Manitoba Hydro on February 29, 1996 that water rentals would be applied on a monthly basis. Manitoba Hydro has submitted this data on a monthly basis.

A copy of the February 29, 1996 letter can be found in Appendix A.

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.*

Observance

Manitoba Hydro has provided the payments as required.

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

Electrical energy production at the Jenpeg Generating Station is recorded and stored digitally. The megawatt output from each unit is sent to a Stored Program Process Computer (SPPC) from digital meters in the station. A sample of the provincial data for September 2015 can be found as shown on Figure 3. A screen display of the SPPC can be seen in Figure 4.

51(4) *Every 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.*

Observance

The timber clearing due to flooding in the vicinity of Jenpeg is deemed to be associated with the Lake Winnipeg Regulation project.

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

The flooding in the vicinity of Jenpeg is deemed to be associated with the Lake Winnipeg Regulation project.

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

Manitoba Hydro has properly maintained sites with structures for public safety and to provide a safe working environment for employees. An ongoing dam safety program is in place to ensure the integrity of these structures.

The waterways in the vicinity of dams and their appurtenances, because of frequent and unpredictable changes in water levels and flow conditions, can be dangerous to the public. The Public Water Safety around Dams (PWSD) Program was created to determine if any potential public safety hazards exist within the area of influence of structures that are owned and operated by Manitoba Hydro and to address those issues if they exist. These potential hazards may arise in areas where the dangers posed by structures on the waterway are not as well known to the public as Manitoba Hydro believes they should be. This is especially true in the immediate upstream and downstream vicinity of hydroelectric dams and control structures.

Manitoba Hydro's Dam Safety Program is designed to protect the public, the environment, our employees, and the Corporation from the effects of an uncontrolled release of the reservoir behind a dam. The program is based on the Canadian Dam Association "Dam Safety Guidelines 2007". Manitoba Hydro applies the principles of dam safety during all stages of the life cycle of a dam, including: planning, design, construction, operation and decommissioning. Both concrete and embankment dams continue to be inspected and assessed at regular intervals for any anomalies or deficiencies. Manitoba Hydro staff perform monthly routine inspections of the embankment dams, and semi-annual routine inspections of the concrete dams, including the spillway. Intermediate inspections of all water retaining structures are performed by specialists from Manitoba Hydro's Engineering Services Division annually. Data from inspections, instrumentation reviews and engineering analysis are used to perform a condition assessment of the structures annually.

A Dam Safety Review (DSR) for Jenpeg GS was performed by KGS Group in 2002. Overall, they determined that the dams were "well designed, operated and maintained". Manitoba Hydro has addressed many of the deficiencies and non-conformances identified in the DSR and continues to address any new or outstanding issues through ongoing dam safety program activities.

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

Manitoba Hydro has properly maintained site lands to reduce the risk of fires. Fire suppression equipment is installed. Manitoba Hydro has a corporate fire prevention and protection program designed to eliminate risks of fire or explosion involving corporate property.

54(3) *For the purpose of limiting the spread of fires or for other reasonable purposes, every interim or final licensee shall clear and keep clear the lands of the province along his or her transmission lines for such width and in such manner as the minister may direct.*

Observance

Manitoba Hydro undertakes tree clearing and maintenance of its transmission rights-of-ways throughout the province via a Transmission Line Vegetation Management Program that integrates environmentally responsible practices.

54(4) *Every interim or final licensee shall, to the satisfaction of the minister, dispose of all brush, refuse or unused timber on lands of the province resulting from the construction and maintenance of the works, and shall keep the lands covered by his or her licence clear of unnecessary combustible material at all times.*

Observance

Manitoba Hydro has disposed of brush, refuse and timber.

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

The Jenpeg GS transmission system was designed to meet CSA clearance standards ensuring all required safety standards were incorporated at the design stage. Public safety is further enhanced through regular maintenance, signage, and public safety education campaigns.

57(1) *Except as expressly provided in this regulation, the interim or final licensee shall not erect any buildings or structures whatever upon any lands of the province without first submitting plans thereof to the director and securing the director's approval for such building or structure and the site thereof.*

Observance

The Interim Licence in Article 3 provides Manitoba Hydro permission for "... constructing works as deemed necessary for the undertaking". Several of the initial buildings have been replaced.

59 *Any lands desired by an interim or final licensee for subdivision for townsite or other purposes shall be set out in the application, interim or final licence separately from lands required for other purposes connected with the undertaking, and the promotion of any such townsite shall be subject to the approval of the minister and to such conditions with respect to town planning, landscape architecture and sanitation as the minister may impose.*

Observance

There is no townsite at Jenpeg, though there are a few houses and a staff house to accommodate staff while they are on their work shift. Manitoba Hydro considers the houses and staffhouse to be part of the lands required for the project. The proposed final licence drawings will show this area.

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

Manitoba Hydro has installed and uses appropriate equipment. It is in the corporation's best interest to continuously optimize all components that have a role in producing electricity.

Manitoba Hydro provides an annual report to the Department of Conservation and Water Stewardship on major construction and maintenance activities.

64 *The licensee, before making any material change in any existing works or in their location, shall submit a complete and satisfactory statement and plans of such proposed change to the director, and shall not proceed to carry out the same until such proposed change has been authorized.*

Observance

There have been no material changes to the structures listed in the Interim Licence.

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.*

Observance

The forebay and tailrace water levels at the Jenpeg Generating Station are tracked using still-well gauges. Photos of the forebay and tailrace gauges can be seen in Figures 5 and 6. Digital signals from these gauges are sent to and stored in the Stored Program Process Computer (SPCC). A screen display of the SPCC can be seen in Figure 4. Manual readings are taken periodically to verify that the digital records are accurate. The five spillway gate openings, associated with the Lake Winnipeg Regulation *Water Power Act* Licence, are measured from transducers on each gate that can also be verified manually. Figure 7, shows the digital readings of the forebay, tailrace and spillway gates as seen in the control room.

Manitoba Hydro has installed, operated and maintained gauges to monitor the electrical energy production and to determine the forebay and tailrace levels. To date the director has not required Manitoba Hydro to install additional gauges.

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

Manitoba Hydro has kept records of all gauge readings and has submitted these to the Province on a regular basis. All records are available to the Province.

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;

Observance

Manitoba Hydro optimizes the usage of the available water. Plant operations are maximized by operating when possible at the most efficient head and wicket gate opening based on

periodic field tests. Manitoba Hydro also attempts to optimize the use of available stream flows on a system wide basis using computer models.

(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

Observance

Manitoba Hydro has not found any orders issued by the minister in its historical research of this project. Manitoba Hydro would conform to orders made by the minister.

(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

Section 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.*

Observance

Manitoba Hydro's Annual Report includes each of the above items on a corporate wide basis. Details of the accounting for individual projects are available upon request.

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

Manitoba Hydro provides an Annual Report to the minister to which the director is responsible.

87 *Notwithstanding any rights granted or approval given by any licence, every licensee shall comply fully with the provisions of the Navigable Waters Protection Act (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

Manitoba Hydro is committed to and continues to observe the provisions of the Navigation Protection Act (formerly the Navigable Waters Protection Act) and all provincial statutes and regulations.

FIGURES

Figure 1
Location Plan

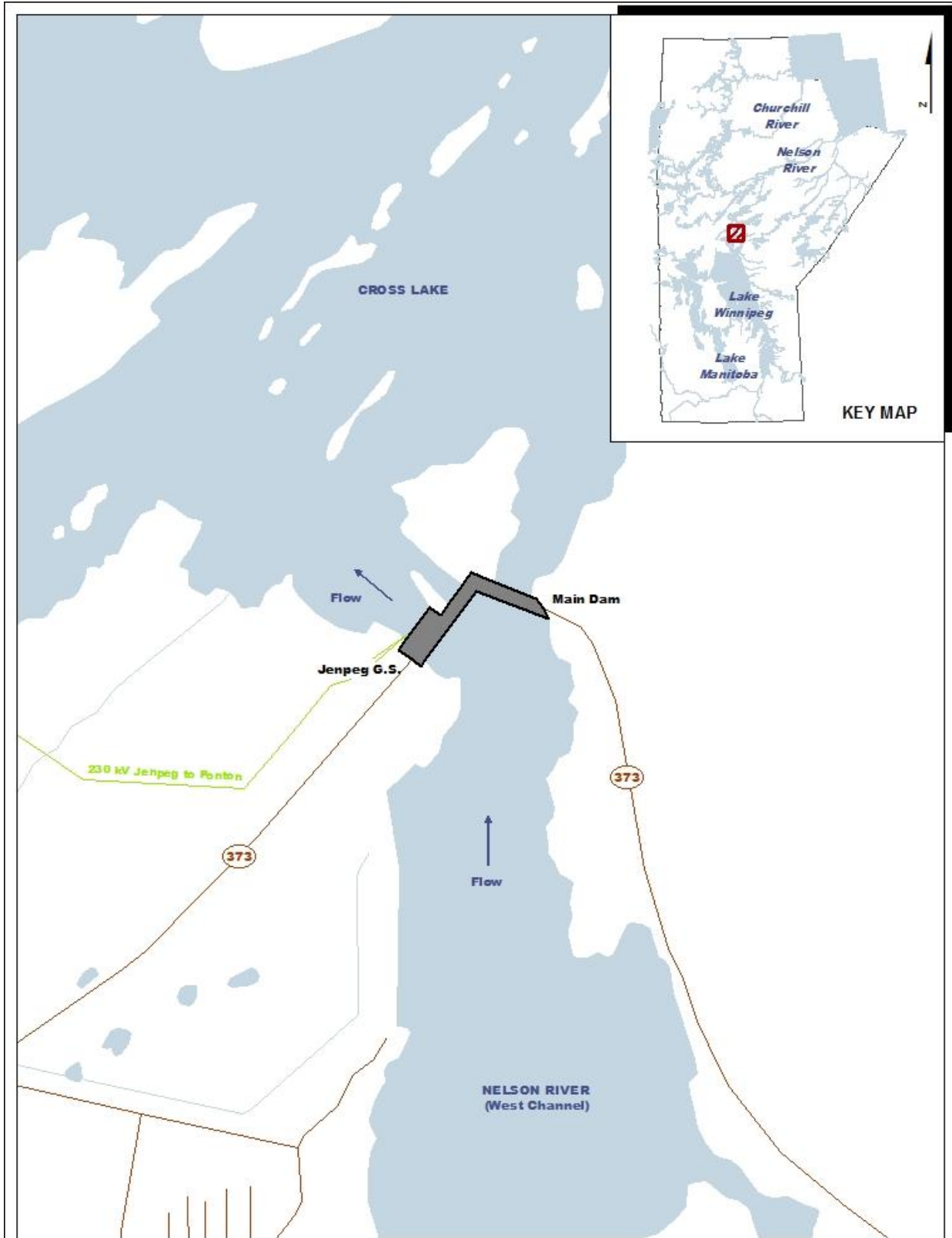


Figure 2

Jenpeg Generating Station and Spillway Structure Photo



Figure 3

Sample of Daily Data

MANITOBA

DEPARTMENT OF NATURAL RESOURCES

Monthly Power Report

WATER RESOURCES BRANCH

Generating Station JenPeg GS
 Owned and Operated by Maintoba Hydro
 River Nelson Month September Year 2015

1 Day	2 Maximum Load kW	3 Minimum Load kW	4 Total Power Generated kWh	5 Average Load kWh = Total / 24	6 Local Service or Distinctions kWh	7 Net Output kWh	8 Load Factor	9 Forebay Gauge meters		10 Tailrace Gauge meters		12 Tailrace Gauge meters	13 Average Head metres
								Max.	Min.	Max.	Min.		
1	86 000	87 000	2 085 800	87 325	19 620	2 075 980	99.2	217 330	217 308	207 846	207 794	9.492	
2	87 800	87 200	2 098 200	87 425	19 600	2 078 400	99.6	217 340	217 328	207 850	207 821	9.501	
3	88 600	87 000	2 109 000	87 875	20 100	2 088 900	99.2	217 397	217 326	207 843	207 806	9.539	
4	87 600	84 200	2 070 800	86 283	20 600	2 060 200	98.3	217 382	217 161	207 862	207 821	9.429	
5	84 200	81 800	1 988 800	82 908	21 500	1 988 300	98.5	217 154	217 026	207 914	207 853	9.160	
6	82 000	79 600	1 936 400	80 683	22 000	1 914 400	98.4	217 033	216 950	208 019	207 914	9.025	
7	85 000	81 400	2 008 000	83 683	23 220	1 982 780	98.3	217 158	217 038	207 960	207 850	9.219	
8	85 600	83 600	2 032 800	84 742	22 820	2 010 880	99.0	217 193	217 117	207 907	207 943	9.268	
9	83 600	79 600	1 952 200	81 383	24 120	1 929 380	97.3	217 117	216 898	207 870	207 911	9.052	
10	81 200	79 400	1 920 000	80 000	22 620	1 897 380	98.5	216 888	216 783	208 002	207 943	8.866	
11	80 400	79 400	1 914 000	79 750	23 500	1 880 700	99.2	216 851	216 792	208 010	207 976	8.814	
12	81 600	80 200	1 948 800	81 200	23 000	1 925 900	99.3	216 955	216 849	208 014	207 907	8.911	
13	81 800	81 000	1 951 600	81 317	22 420	1 929 180	99.4	216 974	216 950	208 064	208 014	8.918	
14	81 800	80 800	1 950 200	81 258	22 820	1 927 280	99.3	216 982	216 940	208 073	208 032	8.904	
15	81 600	80 600	1 926 600	80 275	23 700	1 902 900	98.4	216 977	216 903	208 174	208 049	8.863	
16	81 000	79 400	1 922 200	80 092	23 640	1 898 260	99.6	216 878	216 842	208 235	208 100	8.684	
17	81 000	80 600	1 950 200	81 256	24 140	1 928 060	99.6	216 858	216 837	208 105	208 051	8.764	
18	82 400	81 400	1 983 800	81 825	24 500	1 939 300	99.3	216 888	216 851	208 081	208 046	8.807	
19	82 600	81 600	1 975 000	82 292	22 420	1 952 580	99.6	216 842	216 808	208 103	208 051	8.631	
20	84 000	82 400	2 000 200	83 342	22 400	1 977 900	99.2	217 009	216 942	208 110	208 059	8.869	
21	83 600	83 200	1 475 400	61 892	23 820	1 448 780	73.4	217 034	216 890	208 154	208 056	8.866	
22	55 200	52 600	1 298 800	54 158	23 460	1 276 340	98.1	216 842	216 778	208 066	208 005	8.833	
23	81 200	82 200	1 442 200	60 383	24 120	1 425 380	74.4	216 825	216 773	208 142	208 036	8.676	
24	84 200	81 000	1 973 000	82 208	23 540	1 949 460	97.6	216 935	216 802	208 147	208 073	8.759	
25	87 600	84 200	2 058 400	85 642	22 720	2 032 980	97.6	217 122	216 935	208 076	208 022	8.956	
26	88 600	87 600	2 114 800	88 117	22 820	2 092 280	99.5	217 183	217 124	208 051	208 017	9.122	
27	89 600	88 400	2 138 400	89 100	23 820	2 114 880	99.2	217 195	217 131	208 041	207 953	9.181	
28	89 200	85 000	2 100 800	87 533	33 820	2 069 880	98.1	217 127	216 889	208 000	207 936	9.046	
29	84 800	83 600	2 018 400	84 142	25 260	1 983 140	99.2	216 881	216 824	208 044	207 995	8.822	
30	85 600	83 600	2 030 600	84 617	24 020	2 000 780	99.6	216 940	216 829	208 054	208 014	8.853	
31													
For the Month	89 600	82 200	58 370 600	81 070	864 340	57 875 260	90.3	217 397	216 773	208 235	207 794	9.003	
For the Year	127 400	1 200	533 619 700	81 466	7 767 540	529 852 160	53.9	217 684	214 208	208 804	207 590	7.988	

Notes: 1. In columns 2 and 3 the instantaneous maximum or minimum is required. If this is not available, please state in minutes the time interval of the readings. 60 minutes.
 2. The load factor in column 8 is the ratio of the average load to the maximum load to the maximum load obtained thus $\frac{\text{Average load} \times 100}{\text{maximum load}}$
 3. When completed please return to Water Resources Branch

Load factor for the month by formula: 90.3 %

Certified Correct (Plant Manager)

Figure 4

Screen Display of Stored Program Process Computer



Figure 5

Forebay Still-well Gauge



Figure 6

Tailrace Still-well Gauge



Figure 7

Control Room Digital Display of Forebay, Tailrace and Spillway Gate Positions



APPENDIX A

APPENDIX A – Reference Correspondence

This appendix provides reference correspondence for Sections 2, and 3 in chronological order.

- March 10, 1978
Reference from term 4 of licence – see page, 35
- July 7, 1978
Reference from term 4 of licence – see page, 39
- August 21, 1979
Order-In-Council 812/1979 - Reference from term 4 of licence – see page, 41
- November 13, 1979
Reference from Water Power Regulation section 42(1) – see page, 64
- October 15, 1995
Order-in-Council 597/1995 – reference from term 7 of licence – see page, 45
- February 29, 1996
Reference from term 8 of licence – see page, 49
- November 4, 1996
Reference from term 7 of licence – see page, 50
- June 24, 2010
Order-In-Council 201/2010 – reference from term 7 of licence – see page, 52

J. F. Furnall
General Counsel & Secretary

Mr. T. E. Weber
Senior Assistant Deputy Minister
Water Resources Division

March 10, 1978

13E

JENPEG GENERATING STATION – INTERIM LICENCE APPLICATION FOR EXTENSION OF TIME

By this memorandum, Manitoba Hydro hereby applies for an extension of time for the Interim Licence for the Development of Water Power at the Jenpeg site under the provisions of Manitoba Regulation 95/45.

The Interim Licence for the Jenpeg development was dated December 14, 1972. Article 4 of the said Interim Licence stipulates that within five (5) years from the date of issue, the Licensee shall have satisfactorily completed the installation of six turbine generator units having a capacity of 220,000 horsepower, and shall be in a position to apply the power to beneficial use. The five year term expired on December 14, 1977. As you are aware, at the present time, only one of the six turbine generator units is installed and operating for beneficial use.

Article 40(1) of the Water Power Regulations as amended, provide for an extension of time, as follows: ". . . . no extension of time fixed in any interim licence. . . for the completion of the initial development, may be granted to any interim licensee unless the Minister is satisfied, after report in writing from the Director, that the interim licensee has been prevented by engineering difficulties that could not reasonably have been foreseen or by other peculiar and special causes beyond his control other than the want of funds, from completing the said requirement within the time stated, and then only upon the passage of an order by the Lieutenant-Governor-in-Council approving the said extension."

Article 40(3) of the Regulations provides for an extension of time for completion of the initial development only if it is shown that a substantial part has been completed in the original time given. We would advise you that a substantial portion has been completed, including all excavation, substructure, embedded steel parts, superstructure, transmission line and substation, townsite, and the first of six units. Essentially the principle remaining work is the erection and commissioning of the five remaining units, of which units 4 and 5 are well along.

Article 40 (3) continues on to stipulate that no extension of time will be granted for more than one year, and that a second or subsequent extension of time will not be granted unless it can be shown that a further substantial part of the initial development has been completed during the first extension.

Mr. T. E. Weber
March 10, 1978
Page 2

Attached is a table showing the original schedule of in-service dates as submitted by the turbine-generator supplier in his tender documents, dated May 5, 1972, with revision #1 as agreed in the contract, dated, June 14, 1973. It can be seen that this revision #1 schedule would easily have met the five year term of the licence. Due to a number of factors beyond our control, which are enumerated below, it has been necessary with some reluctance to revise the schedule to later and later dates four additional times, as shown on the attached table. Even revision #2 would have met the five-year licence term. The present schedule #5, dated January 18, 1978 shows that we expect to have units 5, 4 and 3 completed by December 1, 1978, that is, within a one-year extension of time. But it is also apparent that units 2 and 1, with expected completions respectively in April and July 1979, would require a second year's extension of time. It will therefore be Manitoba Hydro's expectation to formally apply for this second extension when the time is appropriate.

We enumerate the main contributing factors for the delay in completing the initial development, and it can be seen that these are difficulties that could not reasonably have been foreseen, and are of such a nature as to have been beyond the control of Manitoba Hydro. The contractor for the supply and installation of the six turbine generators is V/O Energomachexport Trading Limited, of Moscow, USSR; the two principal subcontractors manufacturing the equipment were Leningrad Metal Works and Stecrosila works, both of Leningrad, USSR, with the erection subcontractor, Flanders Installations Ltd., of Vancouver, Canada.

1. The Leningrad Metal Works suffered a very serious plant fire in July 1974, which not only delayed deliveries by about one year, but interfered with normal production methods resulting in poorly fitting components some of which required repairs and remedial work on site.
2. It was necessary to employ a Canadian erecting subcontractor. No erector on the North American continent had any previous experience with bulb turbine installations and in many cases, much unnecessary work was done in the learning stage. Such experience is not now unique nor is it limited to Russian made equipment, as delays in erection have occurred with the American project at Rock Island on the Columbia River where French made Neyrpic bulb units are being installed.
3. The machine components were not manufactured to the required tolerances normally expected of North American made equipment, and such difficulty was experienced in fitting and alignment plus remedial work found to be necessary. Apparently the Russians find this an acceptable procedure in their own work on the basis that it is an economic approach. This is obviously not true in Canada. The dismantling, refitting and reassembly procedures led to frustration on the part of tradesmen and supervisors and an unproductive atmosphere on site, compounded by a resistance of Canadian tradesmen toward working on Russian equipment.

Mr. T. E. Weber
March 10, 1978
Page 3

4. Flanders Installations Ltd. is a subcontractor of EMEC, not a direct contractor of Manitoba Hydro. The rate of progress on installation work was directly related to the size and efficiency of the work force provided by the subcontractor, but their productivity was well below what can be considered the industry norm. We were not encouraged to believe that it was either practical or desirable to make arrangements to have an experienced Soviet installation labour work force at site to do physical work on the equipment. Such a course would have met with concentrated resistance from the Canadian work forces who might well have refused to work under such conditions.
5. Unforeseen problems developed due to the performance of the technical experts from Russia on site to supervise the work, to recommend installation procedures, and to ensure the designers requirements were met. There was conflict of objectives between the Russian technical experts, and their competence was sometimes questioned, compounded by the language barrier.
6. The erection subcontractor was to do the installation work for the contractor at a fixed price, subject only to escalation of labour rates based on a formula. The late deliveries and the re-fitting and re-assembly work which had to be done led to the Russians abandoning the fixed price contract in favour of a "cost plus" arrangement. This did nothing to help productivity and may have contributed to it. The additional costs thus incurred are to the Russian's account. We understand that a new arrangement has been entered into between the contractor and its subcontractor for a "target" type contract with bonus and penalty clauses. In addition, new arrangements have been worked out between Manitoba Hydro and EMEC, the objective of which is to assure, as far as is possible at this time, that the work will be completed as expeditiously as possible and with a minimum of further delay.

We request that you give this application for an extension of time your early consideration, since it affects the provisions of the interim licence with regard to the declaration of the date upon which the initial development is to have been completed, and in turn, the amounts payable for water and land rentals, for which the initial invoice has now been received by Manitoba Hydro. We hasten to advise you that we do not dispute the provisions of Article 9 of the Interim Licence relative to the payment of water rentals at the rate of \$1.25 per horsepower-year output for any generation and transmission of power prior to the completion of the initial development, but we do seek to avoid paying a penalty of \$0.50 per installed horsepower under the provisions of Article 8(a) of the Interim Licence, for installed horsepower which in fact has not been installed due to a number of unforeseen difficulties and special causes beyond the control of Manitoba Hydro.

FMA/rm

bcc: P. M. Abel

JENPEG GENERATING STATION
IN-SERVICE DATE SCHEDULES

Original Sch. - May 5, 1972 -- tender

Unit No. 1 September 15, 1975
Unit No. 2 November 15, 1975
Unit No. 3 January 15, 1976
Unit No. 4 March 15, 1976
Unit No. 5 May 15, 1976
Unit No. 6 July 15, 1976

Revision #3 - October 12, 1976

Unit No. 6 March 1, 1977
Unit No. 5 June 1, 1977
Unit No. 4 September 1, 1977
Unit No. 3 November 1, 1977
Unit No. 2 January 1, 1977
Unit No. 1 March 1, 1978

Revision #1 - June 14, 1973 - contract

Unit No. 6 July 1, 1976
Unit No. 5 September 1, 1976
Unit No. 4 November 1, 1976
Unit No. 3 January 1, 1977
Unit No. 2 March 1, 1977
Unit No. 1 May 1, 1977

Revision #4 - March 16, 1977

Unit No. 6 July 31, 1977
Unit No. 5 November 30, 1977
Unit No. 4 March 31, 1978
Unit No. 3 May 31, 1978
Unit No. 2 July 31, 1978
Unit No. 1 September 30, 1978

Revision #2 - May 25, 1976

Unit No. 6 September 1, 1976
Unit No. 5 December 1, 1976
Unit No. 4 March 1, 1977
Unit No. 3 May 1, 1977
Unit No. 2 July 1, 1977
Unit No. 1 September 1, 1977

Revision #5 - January 18, 1978

Unit No. 6 June 21, 1977 - in service
Unit No. 5 April 1, 1978
Unit No. 4 September 1, 1978
Unit No. 3 December 1, 1978
Unit No. 2 April 1, 1979
Unit No. 1 July 1, 1979

Manitoba Hydro
System Operations Division
System Operating Dept.
February 24, 1978

DEM/rm

J. F. Funnell
General Counsel
& Secretary

Honourable Alan Brian Ransom
Minister of Mines, Resources and
Environmental Management

1978 07 07

13E

JENPEG GENERATING STATION - INTERIM LICENCE - APPLICATION FOR EXTENSION OF TIME

Under the provisions of the Water Power Act and Regulations 95/45, Manitoba Hydro formally applied to the Director of Water Resources for an extension of time within which to complete the generating installations at the Jenpeg Generating Station. This was done by memorandum from me to Mr. T. E. Weber, Senior Assistant Deputy Minister, Water Resources Division, dated March 10, 1978. We attach a copy of this memorandum for your information, rather than duplicate much of the information contained in that memorandum.

In addition to the references to Manitoba Regulation 95/45, Section 40, subsections (1) and (3) contained in our March 10 memorandum, we would now draw your attention to subsection (4) of the same section, which says:

- 40 (4). "If by reason of any of the special causes referred to in subsection (1) above, the interim licensee desires an extension of time to complete the said requirements within the time stated, he shall make application to the Director in writing, giving his reasons for the desired extension, and if no Order-in-Council authorizing an extension of time has been passed within three months after making such application, he shall be allowed thirty days in which to bring the matter to the attention of the Minister, and the Minister may thereupon institute an inquiry by the Director or by such other officer, board, or person as he may designate or appoint, and take such action after hearing his or their report in conformity with the provisions of this section as he deems just. In the event that the Director has not submitted the said report and the interim licensee fails to bring the matter to the notice of the Minister within the said thirty days, the interim licence shall automatically become null and void."

You will appreciate that the three month period after initial application for extension of time dated March 10, 1978, expired on June 10, 1978. We would advise you that no Order-in-Council authorizing this extension of time has been received by us, and we would conclude that none has been passed.

The thirty day time limit within which the licensee, Manitoba Hydro, is allowed to bring the matter to your attention will expire on July 10, 1978, otherwise the interim licence for Jenpeg will become null and void.

Honourable A. Brian Ransom
Page 2
1978 07 07

Therefore by means of this memorandum, we are hereby formally bringing this matter to your attention.

Having attached a copy of our March 10 memo to Mr. Weber, we would like to list some errata in that memo, and some later information: -

Page 1, second paragraph - At the present time, there are now two of the six turbines installed and operating for beneficial use, the second one having been commissioned on April 29, 1978.

Page 2, first paragraph - Subsequent to the writing of this memorandum, it was found that there was another Schedule of In-Service Dates approved by our General Manager, dated September 6, 1977, as follows:

Revision #5 - September 6, 1977

Unit No. 6	June 21, 1977 - in service
Unit No. 5	November 30, 1977
Unit No. 4	May 31, 1978
Unit No. 3	September 15, 1978
Unit No. 2	November 15, 1978
Unit No. 1	January 31, 1979

The Revision which was dated January 18, 1978, should now be referred to as Revision #6.

Page 2 - second paragraph - The second manufacturing subcontractor should be spelled "Electrosila Works" rather than "Etecirosila works."

Page 3 - item 6, fifth line - The sentence "This did nothing to help productivity and may have contributed to it." should read, "This did nothing to help productivity and may have contributed to lessening it."

We look forward to your early reply.

PMA/rdc

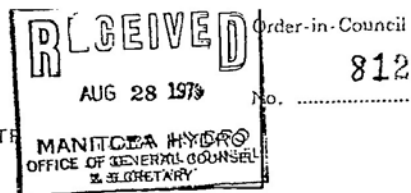
bcc: W. J. Tishinski

c: T. E. Weber

Original Signed By
W. J. TISHINSKI



MANITOBA



ON MATTERS OF STATE

To His Honour the Lieutenant-Governor-in-Council

The undersigned, The Minister of Mines, Natural Resources and Environment
submits for approval of Council a report setting forth that:

WHEREAS an interim licence was issued to Manitoba Hydro (hereinafter called Hydro) on December 14, 1972, for the development of water power at the Jenpeg Site on the west channel of the Nelson River, under The Water Power Act, Continuing Consolidation of the Statutes of Manitoba Chapter W 70, and the Water Power Regulations, being Manitoba Regulation 95/45, and all amendments thereto;

AND WHEREAS subsections (1), (3) and (4) of Section 40 of the said Regulation provides as follows:

"40(1) Notwithstanding the foregoing section, no extension of the time fixed in any interim licence for the filing of the general construction plans or for the commencement of construction, or for the expenditure of the sums required to be expended within any stated period, or for the completion of the initial development, may be granted to any interim licensee unless the Minister is satisfied, after report in writing from the Director, that the interim licensee has been prevented by engineering difficulties that could not reasonably have been foreseen or by other peculiar and special causes beyond his control other than the want of funds, from completing the said requirement within the time stated, and then only upon the passage of an order by the Lieutenant-Governor-in-Council approving the said extension."

"40(3) The time required by the interim licensee for the completion of the initial development shall in no case be extended by the Lieutenant-Governor-in-Council unless it is shown by report in writing signed by the Director that the interim licensee has satisfactorily completed the construction of a substantial part of the said initial development within such time, and no second or subsequent extension of time shall be granted unless it is shown by report of the Director in writing that the interim licensee has completed within the extension period previously granted a further substantial part of the said initial development."

"40(4) If by reason of any of the special causes referred to in sub-section (1) above, the interim licensee desires an extension of time to complete the said requirements within the time stated, he shall make application to the Director in writing, giving his reasons for the desired extension, and if no Order-in-Council authorizing an extension of time has been passed within three months after making such application, he shall be allowed thirty days in which to bring the matter to the attention of the Minister, and the Minister may thereupon institute an inquiry by the Director or by such other officer, board, or person as he may designate or appoint, and take such action after hearing his or their report in conformity with the provisions of this section as he deems just. In the event that the Director has not submitted the said report and the interim licensee fails to bring the matter to the notice of the Minister within the said thirty days, the Interim license shall automatically become null and void."

AND WHEREAS the Minister of Mines, Natural Resources and Environment (herein called the Minister) by virtue of Schedule "M" to Order-in-Council No. 991/78 made under The Executive Government Organization Act, is the member of the Executive Council charged with the administration of The Water Power Act and the regulations thereunder;

AND WHEREAS Condition No. 4 of the said interim licence specifies that within five years from the date of the licence, Hydro shall have satisfactorily completed the undertaking and shall have installed all the machinery and equipment required for an initial development of up to six turbine generator units having a total capacity of not less than two hundred and twenty thousand (220,000) horsepower, measured on the turbine shaft, and shall be in a position to apply the power to beneficial use;

AND WHEREAS Hydro has advised that the said initial development has not yet been completed, and has applied for an extension of time for the completion of the initial development;

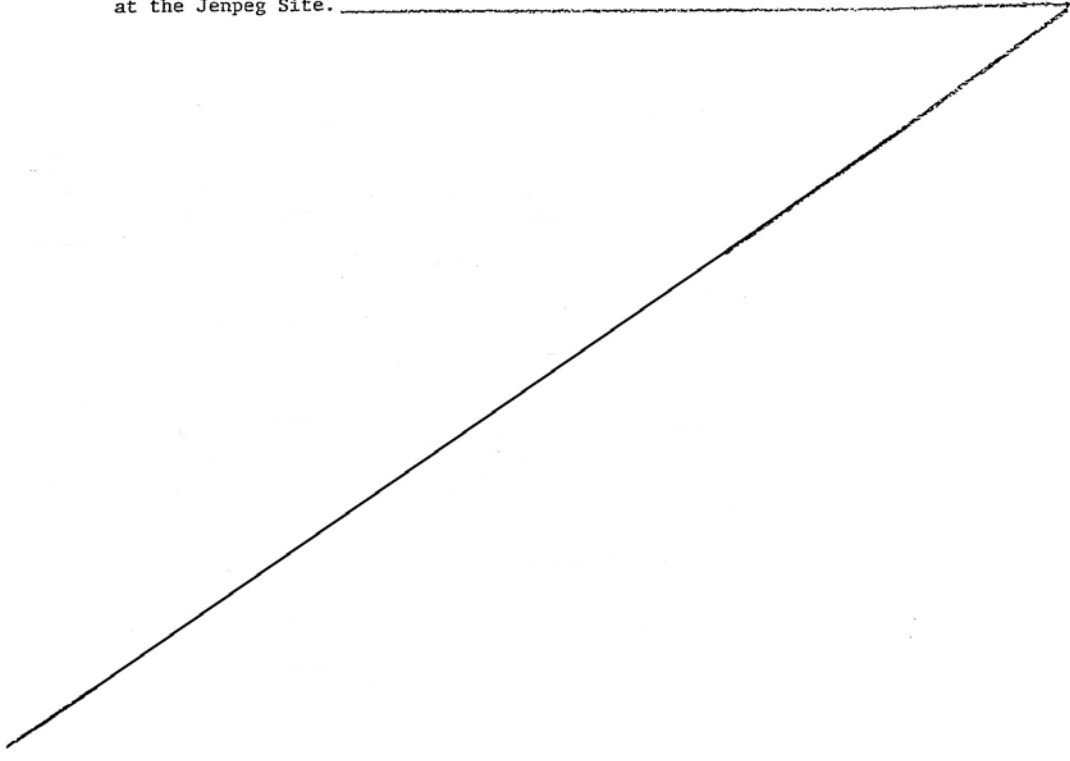
APPENDIX A – Order-In-Council 812/1979, page 2 of 2

AND WHEREAS after a Report in writing dated May 10, 1978, from the Director of The Water Resources Branch, the Minister is satisfied that Hydro has satisfactorily completed the construction of a substantial part of the said initial development within the said five years period, but was prevented by engineering difficulties that could not reasonably have been foreseen or by other peculiar and special causes beyond its control other than the want of funds, from completing the said initial development within the said five years period;

AND WHEREAS the Minister instituted an inquiry by the Honourable George E. Tritschler, Commissioner, Nelson-Churchill River Systems Hydro Inquiry, into the reasons given by Hydro respecting their application for an extension of time for the completion of the initial development, and the Commissioner recommends that a two year extension of time to December 14, 1979 be granted to Hydro within which to complete the requirements of the Jenpeg Interim Licence.

THEREFORE he, the Minister, recommends:

THAT Hydro be granted a two year extension of time extending up to and including December 14, 1979, for the completion of the above recited initial development at the Jenpeg Site. _____



Signature _____

IN THE EXECUTIVE COUNCIL CHAMBER, WINNIPEG

Upon consideration of the foregoing report and recommendation Council advises that it be done as recommended.

.....21st August 1979.....
Date _____ President _____

AT GOVERNMENT HOUSE IN THE CITY OF WINNIPEG

Approved and Ordered this21st..... day ofAugust..... A.D. 1979.....

Lieutenant-Governor

1979 11 13

Our File No. 13E

Mr. T. E. Weber, P. Eng.
Senior Assistant Deputy Minister
Water Resources Branch
Department of Mines, Resources and
Environmental Management
1577 Dublin Avenue
Winnipeg, Manitoba
R3E 3J5

Dear Mr. Weber:

Re: Jenpeg Generating Station.

Pursuant to the requirements of Article 5 of the Interim Licence for the development of water power at the Jenpeg site on the West Channel of the Nelson River, we would advise you that Unit No. 1, the last of six units to be commissioned at the Jenpeg site, was first synchronized to the system on October 30, 1979 at 10:07 o'clock, undergoing a series of mechanical runs and load rejection tests. Ten such tests were carried out on October 30, three more on October 31, and one more on November 1. At 19:12 o'clock on November 1, the unit was placed on load, undergoing what is referred to as the "72-hour test." This 72-hour test was completed on November 4, at which time it was officially declared commissioned by the contractor for warranty purposes.

Under normal circumstances it would have remained in continuous commercial service, starting at 19:12 o'clock on November 1, 1979. However, since this was the last unit to be commissioned at this site, following which the contractor would have vacated the site, it was deemed expedient to take Unit No. 1 back out of service on November 5, 1979, at 8:19 o'clock, for the immediate correction of a number of minor deficiencies. These were carried out between November 5 and November 10. During this time the official transfer certificate for the unit was signed on November 6. On November 10, at 10:00 o'clock, the unit was again placed in full commercial service, only to be reduced to speed-no-load on November 12 for excitation adjustments, after which it was once again placed in full commercial service.

From all of the above, you will see there is a variety of dates which could be justifiably selected as the proper date, for the purposes of the Interim Licence, for the completion of the initial development as defined in Article 4. It may make no difference to the water and land rentals payable, though there still may be the question of completing the project within the term provided in the licence. The term provided under Article 4 was within five years of December 14, 1972. Should a specific date be required, we would recommend

Mr. T. E. Weber
Page 2
1979 11 13

November 1, 1979. Otherwise, "for the purpose of the Interim Licence and Regulations, part (b) of Article 5 would apply, "the limiting date by which the initial development is to be completed, whether the same shall have been completed or not."

Apart from the matter of completion date, we believe that Manitoba Hydro has duly observed and fulfilled all the terms and conditions required by the Interim Licence and under the Regulations, as described under Article 11. We note further the terms and conditions set forth under Article 11, paragraphs (a) to (g) inclusive, which are to be embodied in the Final Licence, to which may be added any further matters "as the Minister may determine in accordance with the Regulations." We also note the distinction between these provisions and the provisions of the Interim and Supplementary Interim Licences for the "Regulation of Water Levels for Water Power Purposes, Lakes Winnipeg, Playgreen and Kiskittogisu."

While we have recommended a delay in the issue of the Final Licence for the Regulation of Lake Winnipeg for a number of reasons, we feel it may be appropriate to proceed with the issue of the Final Licence for Jenppg, if the basis for such Final Licence is as detailed in Article 11 of the Interim Licence, and if the provisions of the Lake Winnipeg Regulation Licence remain separate and distinct as at present.

As with the issue of the Final Licence for the Long Spruce project, it will require the assembly of a set of drawings, plans, elevations, and cross-sections of the development, to form a part of the Final Licence, and a review of the lands required for the development, pursuant to Article 3 of the Interim Licence. We will commence assembly of such material to forward for your consideration.

Yours very truly,

Original Signed By
W. J. TISHINSKI

W. J. Tishinski, P. Eng.
Director
System Operations Division

PMA/rdc



Order in Council
No. 597/1995

On Matters of State

To The Honourable the Lieutenant Governor in Council
The undersigned, the Minister of Natural Resources
submits for approval of Council a report setting forth that:

WHEREAS *The Water Power Act* (C.C.S.M c. W60) provides in part as follows:

14(1) For the purpose of carrying out the provisions of this Act according to their intent, the Lieutenant Governor in Council may make such regulations and orders as are ancillary thereto and are not inconsistent therewith, and every regulation or order made under, and in accordance with the authority granted by, this section has the force of law; and, without restricting the generality of the foregoing, the Lieutenant Governor in Council may make regulations and orders,

(j) for fixing the rental, royalties, fees, dues, or charges, to be paid for the diversion, use, or storage, of water, for the use or occupancy of lands, or for any other privileges granted in pursuance of this Act, including charges for any additional flowage created by storage or regulation works constructed by or at the instance of the Crown;

AND WHEREAS Manitoba Regulation 25/88 R was made in part under that clause;

AND WHEREAS it is considered advisable to amend that regulation as set out in the attached Schedule A;

THEREFORE the Minister recommends:

THAT the regulation set out in the attached Schedule A be made.

Initiating Department/Agency	
Department/Agency	Authorized Officer
Approved by C.S.C. Finance	
Approved as to form by:	
Name	Initials
Civil Legal Services: Legislative Counsel:	JH

Signature _____

IN THE EXECUTIVE COUNCIL CHAMBER, WINNIPEG

Upon consideration of the foregoing report and recommendation Council advises that it be done as recommended.

November 1, 1995

Date

President or Presiding Member

AT GOVERNMENT HOUSE IN THE CITY OF WINNIPEG

Approved and Ordered this 1st day of November A.D. 1995

Lieutenant Governor

SCHEDULE A	ANNEXE A
<p>THE WATER POWER ACT (C.C.S.M. c. W60)</p> <p>Water Power Regulation, amendment</p> <hr/> <p>Regulation Registered</p> <p>Manitoba Regulation 25/88 R amended 1 The <i>Water Power Regulation, Manitoba Regulation 25/88 R, is amended by this regulation.</i></p> <p>2 Section 48 is amended</p> <p>(a) by repealing subsections (1) to (3) and substituting the following:</p> <p>Licence rentals 48(1) Subject to subsection (2), rentals are payable under this section from the date fixed in the original interim licence for the completion of the initial development, whether or not it is completed.</p> <p>Extension granted by minister 48(2) If the minister grants an extension of time under section 40 for the completion of the initial development, the minister may defer the commencement of the rentals payable under this section until the date fixed by the minister under the extension so granted.</p> <p>Rental periods 48(3) A licensee's first rental period shall end on December 31 of the calendar year in which it began and each subsequent rental period shall be the calendar year or part of the year during which the licence is in force or the licensee continues operations.</p>	<p>LOI SUR L'ÉNERGIE HYDRAULIQUE (c. W60 de la C.P.L.M)</p> <p>Modification du Règlement sur l'énergie hydraulique</p> <hr/> <p>Règlement Date d'enregistrement :</p> <p>Modification du R.M. 25/88 R 1 Le présent règlement modifie le <i>Règlement sur l'énergie hydraulique, R.M. 25/88 R.</i></p> <p>2 L'article 48 est modifié :</p> <p>a) par substitution, aux paragraphes (1), (2) et (3), de ce qui suit :</p> <p>Loyers applicables aux licences 48(1) Sous réserve du paragraphe (2), les loyers sont, en vertu du présent article, payables à partir de la date d'achèvement de l'aménagement initiale prévue à la licence provisoire initiale, que cet aménagement soit achevé ou non.</p> <p>Prorogation des délais accordée par le ministre 48(2) Le ministre peut reporter le paiement des loyers payables en vertu du présent article à la date qu'il fixe au moment du délai qu'il accorde, le cas échéant, pour l'achèvement de l'aménagement initial en vertu de l'article 40.</p> <p>Périodes de location 48(3) La première période de location des titulaires de licence se termine le 31 décembre de l'année civile au cours de laquelle elle a débuté. Les périodes de location suivantes correspondent aux années civiles, complètes ou partielles, pendant lesquelles la licence est en vigueur ou les titulaires poursuivent leurs activités.</p>

This is the schedule referred
Le présent règlement est renvoyé

A

Order-In-Council 597/1995

[Handwritten signature and stamp]

Land use rental rates

48(3.1) A licensee shall pay rent for the use of Crown lands occupied for water power purposes under a licence issued under the Act or a regulation at the annual rate of

- (a) \$4.70. per acre for land located along the Winnipeg River; and
- (b) \$1.00. per acre for all other lands.

Water use rental rates

48(3.2) A licensee shall pay rent for the use of water under a licence issued under the Act or a regulation at an annual rate equal to the greater of

- (a) the horsepower capacity of the licensed installation during the year, multiplied by \$3.96.; and
- (b) the horsepower year output of the licensed installation during the year, multiplied by \$9.90.

Land use rental statement

48(3.3) On or before November 30 of each year, the director shall prepare and provide to each licensee a statement of the land use rent payable by the licensee for the ensuing rental period.

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.

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.

Tarifs de location des biens-fonds

48(3.1) Les titulaires d'une licence délivrée en vertu de la Loi ou d'un de ses règlements et permettant l'usage de terres domaniales à des fins reliées aux sources d'énergie hydraulique paient un loyer annuel, au tarif suivant :

- a) pour les biens-fonds situés le long de la rivière Winnipeg : 4,70 \$ l'acre;
- b) pour les autres biens-fonds : 1,00 \$ l'acre.

Tarifs de location pour l'utilisation de l'eau

48(3.2) Les titulaires d'une licence délivrée en vertu de la Loi ou d'un de ses règlements doivent payer un loyer pour l'utilisation de l'eau, au tarif annuel équivalant au plus élevé des montants suivants :

- a) la puissance en cheval-vapeur de l'installation visée par la licence durant l'année en question, multipliée par 3,96 \$;
- b) la quantité d'énergie en cheval-année produite par l'installation visée par la licence durant une année, multipliée par 9,90 \$.

État des loyers pour l'usage des biens-fonds

48(3.3) Au plus tard le 30 novembre de chaque année, le directeur prépare à l'intention des titulaires de licence un état du loyer qu'ils doivent payer pour l'utilisation des biens-fonds pour la période de location suivante.

État des loyers pour l'utilisation de l'eau

48(3.4) Au plus tard le 1^{er} mars qui suit chaque période de location, les titulaires de licence soumettent les données qu'exige le directeur pour l'établissement du loyer annuel exigible pour l'utilisation de l'eau. Sur réception des données exigées, le directeur prépare et remet sans délai aux titulaires de licence un état du loyer qu'ils doivent payer pour la période de location.

Date de paiement des loyers

48(3.5) Le loyer exigible à l'égard de chaque période de location est payable :

- a) dans le cas de la location de biens-fonds, le 2 janvier de la période en question;
- b) dans le cas de la location pour l'utilisation de l'eau, dans les 60 jours suivant la réception de l'état du loyer établi par le directeur pour la période de location.

(b) by repealing subsection (8).

b) par suppression du paragraphe (8).

Coming into force

**3 This regulation comes into force
October 15, 1995.**

Entrée en vigueur

**3 Le présent règlement entre en
vigueur le 15 octobre, 1995.**

Manitoba



RECEIVED

Deputy Minister of
Natural Resources

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

FEB 29 1996

**EXECUTIVE VICE-PRESIDENT
ENGINEERING AND ENVIRONMENT**

FEB 29 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 communicated to you after the above noted consultations have taken place.

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

Yours truly,
Original Signed By: David Tomasson

David Tomasson
Deputy Minister

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

CIRCULATE

ROL	
EAZ	
PEB-F	
DGC	
ADC	
ETF	
RGK	
GRN	
✓ RRR	
EEH	

RECEIVED
FEB 29 1996
DIVISION MANAGER
SYSTEM OPERATING DIVISION

Manitoba



Deputy Minister of
Natural Resources

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

NOV - 4 1996

Mr. A.D. Cormie, P. Eng.
Manager
Energy, Security & Sales
Power Supply
Manitoba Hydro
820 Taylor Avenue
Winnipeg, Manitoba
R3M 3T1

Dear Mr. Cormie:

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

Heretofore, land use rentals have been payable at the beginning of each calendar year, on January 2. Beginning with the 1997-1998 fiscal year, land use rentals will be payable at the beginning of the fiscal year, on April 1.

The purpose of this change is to eliminate the need to accrue the revenue received to the proper fiscal year as required under the accounting procedure recently adopted by the department.

Early in February of each year, an invoice will be issued for the annual land use rentals for the ensuing fiscal year. Payment of this amount will be required on April 1. Early in November, 1996, an invoice will be issued for January, February, and March of 1997. The payment of this amount, which is 90/365 of the annual rentals, will be required on January 2, 1997.



- 2 -

This payment will bring the land use rentals up-to-date for the start of the fiscal year billing interval.

My staff looks forward to working cooperatively with Manitoba Hydro in the implementation of this revised billing practice.

Yours truly,

Original Signed By: David Tomasson

David Tomasson
Deputy Minister



M A N I T O B A
O R D E R I N C O U N C I L

DATE: **June 24, 2010**

ORDER IN COUNCIL NO.: **201/2010**

RECOMMENDED BY: **Minister of Water Stewardship**

REGULATION MADE OR APPROVED: [77/2010](#)

ORDER

The regulation set out in the attached Schedule A, which amends the *Water Power Regulation*, is made.

AUTHORITY

The Water Power Act, C.C.S.M. c. W60, states:

Regulations

14(1) For the purpose of carrying out the provisions of this Act according to their intent, the Lieutenant Governor in Council may make such regulations and orders as are ancillary thereto and are not inconsistent therewith; and every regulation or order made under, and in accordance with the authority granted by, this section has the force of law; and, without restricting the generality of the foregoing, the Lieutenant Governor in Council may make regulations and orders,

...

(j) for fixing the rental, royalties, fees, dues, or charges, to be paid for the diversion, use, or storage, of water, for the use or occupancy of lands, or for any other privileges granted in pursuance of this Act, including charges for any additional flowage created by storage or regulation works constructed by or at the instance of the Crown;

...

Rates regulation may be made retroactive

14(5) A regulation made under clause (1)(j), if it so provides, is effective with reference to a period before it is registered or is published as required by subsection (2), if that period begins no earlier than April 1 of the year in which the regulation is made.

THE WATER POWER ACT
(C.C.S.M. c. W60)

Water Power Regulation, amendment

Regulation 77/2010
Registered June 29, 2010

Manitoba Regulation 25/88 R amended
1 The *Water Power Regulation, Manitoba Regulation 25/88 R*, is amended by this regulation.

2 Subsection 48(3.1) is replaced with the following:

Land use rental rates

48(3.1) A licensee shall pay rent for the use of Crown lands occupied for water power purposes under a license issued under the Act or a regulation at the annual rate of \$1.80 per acre.

Coming into force

3 This regulation is deemed to have come into force on April 1, 2010.

LOI SUR L'ÉNERGIE HYDRAULIQUE
(c. W60 de la C.P.L.M.)

Règlement modifiant le Règlement sur l'énergie hydraulique

Règlement 77/2010
Date d'enregistrement : le 29 juin 2010

Modification du R.M. 25/88 R
1 Le présent règlement modifie le *Règlement sur l'énergie hydraulique, R.M. 25/88 R*.

2 Le paragraphe 48(3.1) est remplacé par ce qui suit :

Tarifs de location des biens-fonds

48(3.1) Les titulaires d'une licence délivrée en vertu de la *Loi* ou d'un de ses règlements et permettant l'usage de terres domaniales à des fins reliées aux sources d'énergie hydraulique paient un loyer annuel de 1,80 \$ l'acre.

Entrée en vigueur

3 Le présent règlement est réputé être entré en vigueur le 1^{er} avril 2010.

Appendix B

**Notification and Determination of Project Completion Documents Including
Records of Transmittal**

APPENDIX B – Notification and Determination of Project Completion Documents Including Records of Transmittal

This appendix provides the following letters of notification and a letter of transmittal indicating the capital cost of the Jenpeg project. As the letter of notification for the initial development (completion of the first unit) has not been located, an invoice for land and power (water) rentals is included as evidence that the province was informed.

- February 28, 1978 letter with enclosed invoice for land and power rentals.
- May 9, 1978 letter of notification for Unit #5
- October 6, 1978 letter of notification for Unit #4
- December 13, 1978 letter of notification for Unit #3
- March 28, 1979 letter of notification for Unit #2
- November 13, 1979 letter of notification for Unit #1
- December 12, 2014 letter indicating the capital cost



DEPARTMENT OF MINES, RESOURCES
& ENVIRONMENTAL MANAGEMENT

Water Resources Division
1577 Dublin Avenue
Winnipeg, Manitoba
R3E 3J5

78 February 28

File: 3.3.2
3.3.3
51.1.11

Mr. L. A. Bateman,
Chairman and Chief Executive Officer,
Manitoba Hydro,
P. O. Box 815,
Winnipeg, Manitoba.
R3C 2P4

Dear Mr. Bateman:

I enclose, in duplicate, an invoice for land rentals and power rentals amounting to \$22,422.04 now due to this Department by Manitoba Hydro in connection with the Jenpeg Generating Station on the Nelson River.

As our fiscal year closes March 31, 1978, we would appreciate receiving payment of the account before that date.

Yours truly,

Original Signed By: T.E. Weber

T. E. Weber, P. Eng.,
Senior Assistant Deputy Minister.

Enclosure.

c.c. W. G. Head.

MANITOBA HYDRO

in account with

Department of Mines, Resources and Environmental Management

WATER RESOURCES DIVISION

RE: JENPEG GENERATING STATION

Land Rentals due January 2, 1978

Power Site Lands from December 14, 1977	\$ 23.29	
Total Land Rentals		\$ 23.29
<u>Power Rentals</u>		
17,935 Horsepower Years @ \$1.25 per Horsepower Year	\$ 22,418.75	
Total Power Rentals		<u>\$22,418.75</u>
TOTAL NOW DUE		<u>\$22,442.04</u>

DEPARTMENT OF MINES, RESOURCES AND ENVIRONMENTAL MANAGEMENT



42811

PROVINCE OF MANITOBA

TO
ADDRESS
Manitoba Hydro
Box 815
Winnipeg, Manitoba

DATE February 24, 1978
ISSUING OFFICE Water Resources Division

► INVOICE ◀

DATE	PARTICULARS	AMOUNT
	Land rentals and Power rentals re: Jenpeg Generating Station due on January 2, 1978 as per attached statement.	\$22,442.04
CREDIT O 6-11	<p>MAKE REMITTANCE PAYABLE TO: MINISTER OF FINANCE OF MANITOBA AND MAIL TO: 800 NORQUAY BLDG., WINNIPEG, MAN. R3C 0P8</p>	

MNR-g-48
8000 12/73

May 9, 1978

**Mr. T. E. Weber, P. Eng.
Senior Assistant Deputy Minister
Water Resources Branch
Department of Mines, Resources and
Environmental Management
1577 Dublin Avenue
Winnipeg, Manitoba
R3E 3J5**

Dear Mr. Weber:

Re: Jenpeg Generating Station

Pursuant to the requirements of Article 5 of the Interim Licence for the development of water power at the Jenpeg site on the West Channel of the Nelson River, we hereby notify you that turbine generator unit no. 5 was successfully commissioned and placed in commercial operation on April 29, 1978 at 00:01 hours. With a name plate rating of 28 megawatts this unit is initially being operated to a maximum of 21 megawatts while a minor problem with the slide valves is being corrected. Full capacity will be available before the end of the month. This is the second unit to be commissioned at this site.

Yours very truly,

**Original Signed By
L. A. BATEMAN**

PMA/
LAB/dc

Appendix B – October 6, 1978 letter

1978 10 06

Our File No. 13E

Mr. T. E. Weber, P. Eng.
Senior Assistant Deputy Minister
Water Resources Branch
Department of Mines, Resources and
Environmental Management
1577 Dublin Avenue
Winnipeg, Manitoba
R3E 3J5

Dear Mr. Weber:

Re: Jenpeg Generating Station

Pursuant to the requirements of Article 5 of the Interim Licence for the development of water power at the Jenpeg site on the West Channel of the Nelson River, we hereby notify you that turbine generator unit no. 4 was successfully commissioned and placed in commercial operation on September 28, 1978 at 12:52 hours. This is the third unit to be commissioned at this site.

Yours very truly,

Original Signed By
L. A. BATEMAN

PMA/

LAB/rdc

1979 11 13

Our File No. 13E

Mr. T. E. Weber, P. Eng.
Senior Assistant Deputy Minister
Water Resources Branch
Department of Mines, Resources and
Environmental Management
1577 Dublin Avenue
Winnipeg, Manitoba
R3E 3J5

Dear Mr. Weber:

Re: Jenpeg Generating Station.

Pursuant to the requirements of Article 5 of the Interim Licence for the development of water power at the Jenpeg site on the West Channel of the Nelson River, we would advise you that Unit No. 1, the last of six units to be commissioned at the Jenpeg site, was first synchronized to the system on October 30, 1979 at 10:07 o'clock, undergoing a series of mechanical runs and load rejection tests. Ten such tests were carried out on October 30, three more on October 31, and one more on November 1. At 19:12 o'clock on November 1, the unit was placed on load, undergoing what is referred to as the "72-hour test." This 72-hour test was completed on November 4, at which time it was officially declared commissioned by the contractor for warranty purposes.

Under normal circumstances it would have remained in continuous commercial service, starting at 19:12 o'clock on November 1, 1979. However, since this was the last unit to be commissioned at this site, following which the contractor would have vacated the site, it was deemed expedient to take Unit No. 1 back out of service on November 5, 1979, at 8:19 o'clock, for the immediate correction of a number of minor deficiencies. These were carried out between November 5 and November 10. During this time the official transfer certificate for the unit was signed on November 6. On November 10, at 10:00 o'clock, the unit was again placed in full commercial service, only to be reduced to speed-no-load on November 12 for excitation adjustments, after which it was once again placed in full commercial service.

From all of the above, you will see there is a variety of dates which could be justifiably selected as the proper date, for the purposes of the Interim Licence, for the completion of the initial development as defined in Article 4. It may make no difference to the water and land rentals payable, though there still may be the question of completing the project within the term provided in the licence. The term provided under Article 4 was within five years of December 14, 1972. Should a specific date be required, we would recommend

Mr. T. E. Weber
Page 2
1979 11 13

November 1, 1979. Otherwise, "for the purpose of the Interim Licence and Regulations, part (b) of Article 5 would apply, "the limiting date by which the initial development is to be completed, whether the same shall have been completed or not."

Apart from the matter of completion date, we believe that Manitoba Hydro has duly observed and fulfilled all the terms and conditions required by the Interim Licence and under the Regulations, as described under Article 11. We note further the terms and conditions set forth under Article 11, paragraphs (a) to (g) inclusive, which are to be embodied in the Final Licence, to which may be added any further matters "as the Minister may determine in accordance with the Regulations." We also note the distinction between these provisions and the provisions of the Interim and Supplementary Interim Licences for the "Regulation of Water Levels for Water Power Purposes, Lakes Winnipeg, Playgreen and Kiskittogisu."

While we have recommended a delay in the issue of the Final Licence for the Regulation of Lake Winnipeg for a number of reasons, we feel it may be appropriate to proceed with the issue of the Final Licence for Jenppg, if the basis for such Final Licence is as detailed in Article 11 of the Interim Licence, and if the provisions of the Lake Winnipeg Regulation licence remain separate and distinct as at present.

As with the issue of the Final Licence for the Long Spruce project, it will require the assembly of a set of drawings, plans, elevations, and cross-sections of the development, to form a part of the Final Licence, and a review of the lands required for the development, pursuant to Article 3 of the Interim Licence. We will commence assembly of such material to forward for your consideration.

Yours very truly,

Original Signed By
W. J. TISHINSKI

W. J. Tishinski, P. Eng.
Director
System Operations Division

PMA/rdc

March 28, 1979

Mr. T. E. Weber, P. Eng.
Senior Assistant Deputy Minister
Water Resources Branch
Department of Mines, Resources and
Environmental Management
1577 Dublin Avenue
Winnipeg, Manitoba
R3E 3J5

Dear Mr. Weber:

Re: Jenpeg Generating Station

Pursuant to the requirements of Article 5 of the Interim Licence for the development of water power at the Jenpeg site on the West Channel of the Nelson River, we hereby notify you that turbine generator No. 2 was successfully synchronized to the AC network on Sunday, March 18, 1979 at 9:38 hours, and has essentially remained in commercial generation since then. The commissioning report was signed, releasing it to the System Operations Division for service on Wednesday, March 21, 1979 at 10:00 hours. This is the fifth unit to be commissioned at this site.

Yours very truly,

Original Signed by *AKM Fraser*
for R. M. FRASER

R. M. Fraser
General Manager -
Corporate Resources

PMA/
RMF/rdc

1979 11 13

Our File No. 13E

Mr. T. E. Weber, P. Eng.
Senior Assistant Deputy Minister
Water Resources Branch
Department of Mines, Resources and
Environmental Management
1577 Dublin Avenue
Winnipeg, Manitoba
R3E 3J5

Dear Mr. Weber:

Re: Jenpeg Generating Station.

Pursuant to the requirements of Article 5 of the Interim Licence for the development of water power at the Jenpeg site on the West Channel of the Nelson River, we would advise you that Unit No. 1, the last of six units to be commissioned at the Jenpeg site, was first synchronized to the system on October 30, 1979 at 10:07 o'clock, undergoing a series of mechanical runs and load rejection tests. Ten such tests were carried out on October 30, three more on October 31, and one more on November 1. At 19:12 o'clock on November 1, the unit was placed on load, undergoing what is referred to as the "72-hour test." This 72-hour test was completed on November 4, at which time it was officially declared commissioned by the contractor for warranty purposes.

Under normal circumstances it would have remained in continuous commercial service, starting at 19:12 o'clock on November 1, 1979. However, since this was the last unit to be commissioned at this site, following which the contractor would have vacated the site, it was deemed expedient to take Unit No. 1 back out of service on November 5, 1979, at 8:19 o'clock, for the immediate correction of a number of minor deficiencies. These were carried out between November 5 and November 10. During this time the official transfer certificate for the unit was signed on November 6. On November 10, at 10:00 o'clock, the unit was again placed in full commercial service, only to be reduced to speed-no-load on November 12 for excitation adjustments, after which it was once again placed in full commercial service.

From all of the above, you will see there is a variety of dates which could be justifiably selected as the proper date, for the purposes of the Interim Licence, for the completion of the initial development as defined in Article 4. It may make no difference to the water and land rentals payable, though there still may be the question of completing the project within the term provided in the licence. The term provided under Article 4 was within five years of December 14, 1972. Should a specific date be required, we would recommend

Mr. T. E. Weber
Page 2
1979 11 13

November 1, 1979. Otherwise, "for the purpose of the Interim Licence and Regulations, part (b) of Article 5 would apply, "the limiting date by which the initial development is to be completed, whether the same shall have been completed or not."

Apart from the matter of completion date, we believe that Manitoba Hydro has duly observed and fulfilled all the terms and conditions required by the Interim Licence and under the Regulations, as described under Article 11. We note further the terms and conditions set forth under Article 11, paragraphs (a) to (g) inclusive, which are to be embodied in the Final Licence, to which may be added any further matters "as the Minister may determine in accordance with the Regulations." We also note the distinction between these provisions and the provisions of the Interim and Supplementary Interim Licences for the "Regulation of Water Levels for Water Power Purposes, Lakes Winnipeg, Playgreen and Kiskittogisu."

While we have recommended a delay in the issue of the Final Licence for the Regulation of Lake Winnipeg for a number of reasons, we feel it may be appropriate to proceed with the issue of the Final Licence for Jenppg, if the basis for such Final Licence is as detailed in Article 11 of the Interim Licence, and if the provisions of the Lake Winnipeg Regulation licence remain separate and distinct as at present.

As with the issue of the Final Licence for the Long Spruce project, it will require the assembly of a set of drawings, plans, elevations, and cross-sections of the development, to form a part of the Final Licence, and a review of the lands required for the development, pursuant to Article 3 of the Interim Licence. We will commence assembly of such material to forward for your consideration.

Yours very truly,

Original Signed By
W. J. TISHINSKI

W. J. Tishinski, P. Eng.
Director
System Operations Division

PHA/rdc



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

2014 12 12

Mr. R. Matthews, Manager
Manitoba Conservation & Water Stewardship
Box 16 - 200 Saulteaux Crescent
Winnipeg MANITOBA R3J 3W3

Dear Mr. Matthews:

JENPEG GENERATING STATION - CAPITAL COSTS

Manitoba Hydro cannot locate a record of having formally transmitted the capital cost of the Jenpeg Generating Station project as required under Article 36(1) of the Water Power Regulation. The cost of the project has recently been reviewed as being \$234.6 million as of 2014.

If you have any questions related to this matter, please call me at 204-360-3018.

Yours truly,

Original Signed by: *Wesley Penner*

W.V. Penner, P. Eng.
Manager
Hydraulic Operations Department

HJE/sl/ 00198-07311-0002_00

Appendix C
List of Drawings

Province of Manitoba Plan Number	Licensee's Drawing Number	Description
	7-00198-E-00048 0001	Main Dam – Jenpeg – As Built – Plan View
	7-00198-E-00048 0002	Main Dam – Jenpeg – As Built – Sections
39-3-1019	1-00198-D-00202 0001 (Rev.0)	Location General Arrangement and Cross-Sections of Development
WULS-1-00198- PE-07311-0001	1-00198-PE- 07311-0001	Jenpeg Generating Station - Severance Line and Lands Required For Flooding and Other Purposes
51-2-3001 (Sht.1)	1-00198-E-01026 0001 (Rev.6)	Powerhouse; Units 1 to 6 & Service Bay; Exterior Elevations General Arrangement (As built)
51-2-3001 (Sht.2)	1-00198-E-01026 0002 (Rev.6)	Powerhouse; Units 1 to 6 & Service Bay; Plan Above Elev. 765.0' General Arrangement (As built)
51-2-3001 (Sht. 3)	1-00198-E-01026 0003 (Rev.5)	Powerhouse; Units 1 to 6 & Service Bay; General Arrangement Section Through Unit (As built)
51-2-3001 (Sht. 4)	1-00198-E-01026 0004 (Rev.4)	Powerhouse; Units 1 to 6 & Service Bay; General Arrangement Section At Contraction Joint (As built)
51-2-3001 (Sht. 5)	1-00198-E-01026 0005 (Rev.5)	Powerhouse; Units 1 to 6 & Service Bay; General Arrangement Sections In Vicinity of Service Bay (As built)
51-2-3001 (Sht. 6)	1-00198-E-01026 0006 (Rev.6)	Powerhouse; Units 1 to 6 & Service Bay; Plan Above El. 714.0' General Arrangement (As built)
51-2-3001 (Sht. 7)	1-00198-E-01026 0007 (Rev.9)	Powerhouse; Units 1 to 6 & Service Bay; Plan At Elev. 691.0' Plan At Elev. 678.0' General Arrangement (As built conditions)
51-2-3001 (Sht. 8)	1-00198-E-01026 0008 (Rev.5)	Powerhouse; Units 1 to 6 & Service Bay; General Arrangement Plan At El. 656.0' Plan At El. 626.0' (As built)
51-2-3001 (Sht. 9)	1-00198-E-01026 0009 (Rev.5)	Powerhouse; Units 1 to 6 & Service Bay; General Arrangement Longitudinal Section Through Powerhouse (As built)