

ASH LAGOON SETTLING POND





LICENCE REVIEW PROCESS

Spring 2004

Begin Environment Act Licence Review for Brandon Unit 5 operations

TODAY'S MEETING

Summer 2004

Open House #1

Introduce Environment Act Licence Review process to public Ask for feedback on issues to include in process

Summer/Fall 2004

Conduct environmental and planning studies for Brandon
Unit 5 operation

Fall 2004

Open House #2

Present results of environmental studies to public

Ask for feedback on study results

Winter 2004/2005

Submit Environmental Impact Statement to Manitoba Conservation for review

Winter 2004/2005

Completion of Environment Act Licence Review process and start implementation of revised Licence requirements





WHO IS CONDUCTING THIS STUDY?

- ◆ A consulting team of professional engineers, environmental scientists and biologists has been contracted to undertake the Environment Act Licence Review studies.
- The consultant team is from:
 - SENES Consultants Limited environmental assessment specializing in air emissions, noise, human health and ecological risk assessment.
 - North/South Consultants Inc. environmental assessment specializing in aquatic and terrestrial impacts.
 - UMA Engineering Ltd. overall project management and coordination of environmental assessment activities.





PUBLIC PARTICIPATION

- ◆ Public input is an <u>integral</u> part of the Environment Act Licence Review process.
- ◆ Your input is very important and <u>all comments</u> will be included in the environmental impact statement provided to Manitoba Conservation.
- ◆ Opportunities for public input during the Environment Act Licence Review include:
 - Today's public open house is an opportunity for you to receive information and provide comments at the start of the process.
 - A second open house will be held later this year to present the results of the environmental studies and allow for further public comments.
 - Members of the Licence Review Team can be contacted for more information about Brandon Unit
 5. See the handout for contact information.





COMMENTS

- ♦ The study team <u>needs your input</u> to:
 - Help define the potential issues of concern to local residents; and
 - Help define the scope and focus of the environmental assessment.
- ◆ <u>It is important</u> that local stakeholders participate in issue identification.
- ◆ <u>Do you have any questions</u> concerning the operation of the Brandon Unit 5?
- ◆ <u>Do you have specific concerns</u> you would like us to address in this Environment Act Licence Review?

PLEASE TAKE THE TIME TO FILL OUT THE COMMENT SHEET PROVIDED





THANK YOU FOR ATTENDING!

Don't forget to complete a comment sheet before you leave





PUBLIC OPEN HOUSE

MANITOBA HYDRO
BRANDON GENERATING
STATION UNIT 5

ENVIRONMENT ACT LICENCE REVIEW





June 29, 2004

Thank you for attending this community open house.

	Formation useful in understanding the Licence Review? an be done to improve the presentation?
	e specific concerns that you would like to see he environmental studies completed as part of the w?
	a question or information request, please provide ur contact information so that we can respond. equest:
(Optional)	Name:Address:Phone:
Instructions: The c	ompleted form can be submitted in the following ways:
	en House, or at the Brandon G.S during business hours; fax to (204) 475-5847 (Brandon); or mail to UMA Engineering, 1479 Buffalo Place, Wpg.,

uma

Manitoba Hydro

June 29, 2004 Thank you for attending this community open house. 1. Was this information useful in understanding the Licence Review? If not, what can be done to improve the presentation? Clear concise and the graphies 2. Do you have specific concerns that you would like to see addressed in the environmental studies completed as part of the Licence Review? dond Communi 3. If you have a question or information request, please provide details and your contact information so that we can respond. **Question or Request:** (Optional) Name: Address: Phone: Instructions: The completed form can be submitted in the following ways: Drop off at this Open House, or at the Brandon G.S during business hours; fax to (204) 475-3646 (UMA) or 726-5847 (Brandon); or mail to UMA Engineering, 1479 Buffalo Place, Wpg.,

Uma

MB., R3T 1L7.

THANK YOU.

Manitoba Hydro #2. what would it mean to the Brandon facility and the overall MB Hydro power production if the license for unit 5 was denied?

June 29, 2004 Thank you for attending this community open house.		
1. Was this information useful in understanding the Licence Review? If not, what can be done to improve the presentation? Useful information.		
2. Do you have specific concerns that you would like to see addressed in the environmental studies completed as part of the Licence Review? The health of the river is essential. He effuent wast be "cleaner" than what is there to ensure improved health R river should be as clean as river agat to be. Emissions to air must exceed hypoto.		
3. If you have a question or information request, please provide details and your contact information so that we can respond. Question or Request:		
(arge scale? (No need to suswer me Specifically).		
(Optional) Name:Address:		
Phone:		
Instructions: The completed form can be submitted in the following ways:		
Drop off at this Open House, or at the Brandon G.S during business hours; fax to (204) 475-3646 (UMA) or 726-5847 (Brandon); or mail to UMA Engineering, 1479 Buffalo Place, Wpg., MB., R3T 1L7.		

THANK YOU.

Manitoba Hydro

uma

June 29, 2004 Thank you for attending this community open house. 1. Was this information useful in understanding the Licence Review? If not, what can be done to improve the presentation? 2. Do you have specific concerns that you would like to see addressed in the environmental studies completed as part of the Licence Review? 3. If you have a question or information request, please provide details and your contact information so that we can respond. **Ouestion or Request:** (Optional) Name: Address: Phone: ~ Instructions: The completed form can be submitted in the following ways: Drop off at this Open House, or at the Brandon G.S during business hours; fax to (204) 475-3646 (UMA) or 726-5847 (Brandon); or mail to UMA Engineering, 1479 Buffalo Place, Wpg., MB., R3T 1L7.

uma

THANK YOU.

Manitoba Hydro



820 Taylor Ave (4) • Winnipeg Manitoba Canada • R3C 2P4
Telephone / N° de téléphone : (204) 474-3690 • Fax / N° de télécopieur : (204) 474-4974
wabrown@hydro.mb.ca

2004 09 28

Ms. Sandy Trudel
Economic Development Officer
Economic Development Brandon
410 - 9th Street
Brandon MB R7A 6A2

Dear Ms. Trudel:

BRANDON GENERATING STATION UNIT 5 OPERATING FRQUENCY

Thank you for your participation and feedback during our June 29, 2004 open house at the Brandon Generating Station to solicit public input into ongoing operations of Unit 5, Manitoba Hydro's 105 Megawatt, coal-fuelled generating unit. Following your review of the storyboards, you offered your opinions and asked us the following question on the "feedback" sheet.

"How often do we burn the coal and how does this frequency compare to the frequency in the early stages of the Unit 5 license? What would it mean to the Brandon facility and the overall Manitoba Hydro power production if the license for Unit 5 was denied?"

In answer to your question, Unit 5 has typically operated between 10 and 70% of the time in any given year. The station is operated when water supplies for hydro plants are low, when there are peak demands for electricity or when equipment outages reduce Manitoba Hydro's supply capability. Therefore, year-to-year operation can range due to the variables noted. For example, the year of 2003/04 was one of the worst drought years on record since Unit 5 has been operating. Over this period, the station operated at the high end of its historic range.

Other variables that affect the amount of operation of the station include the price at which Manitoba Hydro can buy electricity from neighbouring jurisdictions when supplies are short and how much surplus generation capability Manitoba Hydro has available. In recent years, prices for importing power have increased and therefore, at times, it is lower cost to produce electricity from Unit 5 than it is to import (it should be noted that Manitoba Hydro has a general policy of obtaining the lowest cost sources of electricity whenever possible). In addition, demand within the province has grown since 1992. Both of these factors, among the others previously noted, can affect the amount that the station is operated in any given year.

Even with higher operating levels such as in 2003/04, the station produces less than 1% to 2.5% of Manitoba Hydro's overall electricity production in any given year. Although it may appear that Unit 5 plays an insignificant role, it is the ability of Manitoba Hydro to count on this unit as a source of supply, even when it is not needed or running, which acts as an insurance policy against unforeseen events. This has tremendous value to the Corporation, in the order of tens of millions of dollars per year. Should Unit 5 not be allowed to continue operation beyond 2006, the corporation would have to re-evaluate its power resource plan and determine if stations planned for the future would have to be built sooner in order to replace Unit 5. The cost of doing so could be significant and have an impact on consumer rates should this occur. Costs at a regional level would also be felt as numerous staff positions at the facility would be lost.

Once again, Manitoba Hydro appreciates your attendance at the Open House and thanks you for your feedback. If you need additional information, please feel free to contact me at (204) 474-3690.

Yours truly,

W. A. Brown

Manager

Environmental Licensing & Protection

Power Planning & Development

SMB/do/2004-0928.1



820 Taylor Ave (3) • Winnipeg Manttoba Canada • R3M 3T1
Telephone N' de téléphone: (204) 474-3690 • Fax N' de télécopieur (204) 474-4974
wabrowniæhydro.mb.ca

September 14, 2004

Councillor Doug Paterson City of Brandon 410-9th Street Brandon, MB R7A 6A2

Dear Mr. Paterson:

Thank you for your participation in the Brandon Generating Station Unit #5 open house on June 29, 2004. This letter is intended to reply to the question you posed on the open house comment sheet.

Your question was as follows:

"Are there plans to eventually make hydrogen and burn it to make electricity instead of coal?"

The answer is no, Manitoba Hydro is not pursuing this type of process. Hydrogen is not a basic energy source, as your question indicates it must be made. The two most common methods of hydrogen production involve using either natural gas or electricity. More exotic production techniques include gasification processes from any hydrocarbon fuel including coal. When you consider the whole hydrogen production lifecycle, it does not make sense in this application. For instance it would be much more efficient and cost effective to burn coal or natural gas directly than to convert it to hydrogen then burn the hydrogen in the original process. The creation of hydrogen introduces an additional intermediate step along which introduces inefficiencies. Similarly, it would not be efficient to use electricity to produce hydrogen with the intent simply producing electricity.

Hydrogen production is currently better used in other industries such as for chemical products, glass and electronics. While hydrogen does not make sense in utility scale power applications it may play a more significant role in other applications such as portable power and as an energy medium for the transportation sector.

Manitoba Hydro continually considers and evaluates options for alternative fuels and energy sources, particularly those that provide environmental benefits. At this time, Manitoba Hydro has not identified any alternative fuels or electricity production options that are economic at the commercial level for Brandon Unit 5.

Once again, Manitoba Hydro appreciates your attendance at the Open House and thanks you for your feedback. If you need additional information, please contact me.

Yours truly,

W.A. Brown

Manager, Environmental Licensing & Protection

Power Planning & Development

cc: Bob Dandenault



820 Taylor Ave (4) • Winnipeg Manitoba Canada • R3C 2P4
Telephone N' de téléphone (204) 474-3013 • Fax N' de télécopieur (204) 474-4974
dolinyka hydro.mb.ca

2004 09 16

Ms. Sandy Trudel
Economic Development Officer
Economic Development Brandon
410 - 9th Street
Brandon, MB R7A 6A2

Dear Ms. Trudel:

GEOTHERMAL HEAT RECOVERY IN WESTERN MANITOBA

During our June 29, 2004 Open House for the environmental review of the Brandon Generating Station Unit #5, we briefly discussed Manitoba Hydro's interest in geothermal heat recovery. As you are well aware, Manitoba, and in particular the general area around Brandon, is considered a Canadian "leader" in field of geothermal heat recovery and utilization.

I have recently met Mr. Martin Cloutier, Manitoba Hydro's Heat Pump Marketing Specialist. He was able to provide me with an information package concerning geothermal heat pump use for residential or commercial developments. I hope this will be of interest you. In addition to the information package, I have also attached a collection of newspaper clippings that may also interest you.

If you have any additional questions concerning this environment-friendly alternative. I recommend that you contact Mr. Cloutier directly at (204) 477-7248. He indicated that he would be more than pleased to discuss geothermal heat recovery opportunities with you.

We are also preparing a brief written response, under separate cover, to your question at the Open House about the frequency of operations of Brandon Unit 5. We will issue the letter within the next couple of days.

Yours truly,

Dave Olinyk, P. Eng.

Senior Environmental Specialist Environmental Licensing & Protection

e. Martin Cloutier, Manitoba Hydro

DMO/do/Geothermal Trudel Let.doc



S20 Faylor Ave (4) • Winnipeg Manitoba Canada • R3C 2P4

Telephone | V | te :elephone | (204) 474-3913 • Fax | V | de :elecopieur | (204) 474-4974

dolinsk a hydro inb va

2004/09/16

Ms. Beth Saunders General Manager Brandon Area Planning District 421 - 9th Street Brandon, MB R7A 4A9

Dear Ms. Saunders:

GEOTHERMAL HEAT RECOVERY IN WESTERN MANITOBA

During our June 29, 2004 Open House for the environmental review of the Brandon Generating Station Unit # 5, we briefly discussed Manitoba Hydro's interest in geothermal heat recovery. As you are well aware, Manitoba, and in particular the general area around Brandon, is considered a Canadian "leader" in field of geothermal heat recovery and utilization.

I have recently met Mr. Martin Cloutier, Manitoba Hydro's Heat Pump Marketing Specialist. He was able to provide me with an information package concerning geothermal heat pump use for residential or commercial developments. I hope this will be of interest you. In addition to the information package, I have also attached a collection of newspaper clippings that may also interest you.

If you have any additional questions concerning this environment-friendly alternative, I recommend that you contact Mr. Cloutier directly at (204) 477-7248. He indicated that he would be more than pleased to discuss geothermal heat recovery opportunities with you.

Yours truly,

Dave Olinyk, P. Eng.

Senior Environmental Specialist Environmental Licensing & Protection Power Planning & Development Power Supply

e. Martin Cloutier, Manitoba Hydro

DMO/do/Geothermal Saunders Let.doc