

**MANITOBA**  
**THE PUBLIC UTILITIES BOARD ACT**  
**THE MANITOBA HYDRO ACT**  
**THE CROWN CORPORATIONS PUBLIC**  
**REVIEW AND ACCOUNTABILITY ACT**

**Order No. 173/06**

**December 21, 2006**

Before: Graham Lane, C.A., Chairman  
Robert Mayer, QC, Vice-Chairman  
Dr. Len Evans, Member  
Dr. Kathi Avery Kinew, Member

**APPLICATION BY MANITOBA HYDRO FOR EXTENSION OF THE  
APPROVAL OF THE SURPLUS ENERGY PROGRAM**

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## **1.0 Summary**

Pursuant to the *Crown Corporations Public Review and Accountability Act* and *Consequential Amendments Act* and Section 45 of the *Public Utilities Board Act*, Manitoba Hydro (MH) applied by letter of April 19, 2006 for ex parte approval to extend the Surplus Energy Program (SEP) to March 31, 2009. The Public Utilities Board (Board) declined an ex parte process and requested that MH circulate the application to all known interested parties.

The Board, by letter of September 7, 2006, approved the extension of the program to the earlier of October 31, 2007 or an application by MH to amend the program. By letter dated September 28, 2006, MH requested the Board reconsider the end date for the extension, requesting that extension approval be granted until October 31, 2008.

In this Order, the Board confirms its original decision to extend the SEP approval until October 31, 2007, pending reconsideration within proceedings to occur with the next General Rate Application.

## **2.0 Application**

MH noted in its letter of September 7, 2006 that the Board intends to review the SEP at MH's 2007 General Rate Application proceeding, and is prepared to extend the program to October 31, 2007 rather than March 31, 2009 as applied for by MH. MH requested that the Board reconsider its position and extend the program, at a minimum, to October 31, 2008.

MH asserts that SEP customers invest in and maintain plant so as to comply with the terms and conditions of the SEP, and plan their operations so as to maximize benefits available under the SEP. MH opined that as customers would require major

modifications upon the elimination of the SEP, adequate notice of such a possibility is a requirement.

MH noted that Board Order 90/00 establishes a requirement for twelve months notice of any intention to terminate the SEP, and suggested that if the matter is to be considered in the fall of 2007, the program should be extended at minimum to October 31, 2008.

MH noted previously expressed Board concerns with MH sales of off-peak power at prices below 1¢ per kilowatt hour to SEP customers. MH further noted that the Board has suggested that such sales may typically involve the sale of hydraulic energy that otherwise would be stored. MH advised that, typically, off-peak power sales below 1¢ per kilowatt hour are made during periods of high water conditions when water would otherwise be spilled, and suggested that such sales do not involve energy that could otherwise be stored. MH advised this was the case during the early summer of 2006 when off peak energy was sold at prices below 1¢, rather than spilled as a result of already full reservoirs.

### **3.0 Background:**

Board Order No. 90/00 dated June 30, 2000 approved the SEP until March 31, 2004. At that time, modifications were made to the Terms and Conditions regarding the notice period provision should customers wish to go off the program. These changes were approved in Board Order 132/00, September 29, 2000, and 143/01, dated September 13, 2001.

The SEP program replaced the Industrial Surplus Energy (ISE), Dual Fuel Heating (DFH), and Surplus Energy to Self-Generators (SESS) programs. Customers began accepting service under the Terms and Conditions of SEP on December 4, 2000. On March 24, 2003 MH applied to the Board for an extension to the program to March 31,

2005 on an *ex parte* basis. Approval was granted in Board Order No. 153/03, dated October 31, 2003.

On January 29, 2004, as part of a General Rate Application, MH applied for a further extension to SEP until March 31, 2007. The extension was granted in Board Order 101/04, dated July 28, 2004.

The SEP continues to provide a benefit to the twenty-eight customers currently on the program, while revenue neutral so as not to impact non-participating customers.

Revenues from weekly SEP Energy Charges for the period December 2000 to October 31, 2005 were \$5,380,334, MH's marginal cost for the same time period was \$5,176,290, resulting in net revenue of \$204,044 from SEP.

#### **4.0 The Program**

*SEP Option 1* is available to industrial loads which meet the following qualifications:

- a) Total demand must be 1 000 kV.A or greater. Total Demand is defined as the Reference Level of Demand (as described in Section 3 below) plus the level of Demand associated with SEP; and
- b) Demand associated with SEP does not exceed 50 MV.A except where the load factor of such load is guaranteed by the customer, in writing, to exceed 25% on a weekly basis; and
- c) Are not being served under the Curtailable Service Program; and
- d) MH may require a customer to maintain a minimum Power Factor of 90% as a condition of participation.

The Board notes that SEP (>1,000 KVA) pricing has not proven overly attractive to large industry; as there were recently no large industrial customer participating in the program.

Presumably, large industries are more interested in firm energy supplies, particularly at rates that on average have been below average SEP prices.

*SEP-Option 2* is available to heating loads which meet the following qualifications:

- a) Demand must be 200 kW or greater; and
- b) The electricity is to be used for space and/or water heating only; and
- c) The load must be metered separately from the customer's firm load; and
- d) The customer has an alternate energy source as a back-up facility for the entire SEP load; and
- e) Demand associated with SEP does not exceed 50 MW.A except where the load factor of such load is guaranteed by the customer, in writing, to exceed 25% on a weekly basis; and
- f) The load is not being served under the Curtailable Service Program.

The Board notes that SEP - Heating Load pricing has proved moderately attractive to GSM and some institutional customers; there having recently been twenty-two such customers participating in the program. Presumably, these customers are able to avoid alternative higher priced heating fuels. In doing so, these customers reduce CO<sub>2</sub> and other emissions, as typically, hydraulic generation replaces fossil fuels in these circumstances.

*SEP – Option 3* is available to electric loads which meet the following qualifications:

- a) Demand must be between 200 kW and 50 000 kW; and
- b) The load must be fully backed up by generating equipment which is leased or owned by the customer and is located on the premises of the SEP load; and
- c) The load is intermittent and for industrial use which can be deferred, for several days, if necessary, should maintenance of back-up generation be required during a period of interruption of SEP energy supply.

Load would not be considered intermittent if the average monthly load factor exceeds 25%; and

- d) The load must be metered separately from the customer's firm load; and
- e) The load is not being served under the Curtailable Service Program; and
- f) MH may require a customer to maintain a minimum Power Factor of 90% as a condition of participation.

The Board notes that SEP - Self Generation Displacement (GSL <50 KV) has been attractive to customers with seasonably high energy usage; and that there have been six such customers, each of which with energy supply back-up. Presumably, these customers are also able to avoid high cost alternative energy supply and reduce CO<sub>2</sub> and other emissions through SEP.

**5.0 Board Findings**

Since its inception in December 2000, SEP has had a customer base of about 30, suggesting limited appeal. Energy consumption during this period fluctuated between 18 GWh. and 28 GWh. in response to variable weather and peak-hour pricing. Average SEP pricing varied between 3.3¢ and 6.2¢.

	<b>SEP Sales (GWh.)</b>	<b>SEP Average Price</b>	<b>Marginal Cost of Energy to MH</b>
December 2000 to October 2001	18.1	4.9¢/KWh	4.9¢/KWh
December 2001 to October 2002	20.8	3.3¢/KWh	3.4¢/KWh
December 2002 to October 2003	19.5	5.4¢/KWh	5.2¢/KWh
December 2003 to October 2004	19.3	6.2¢/KWh	5.1¢/KWh
December 2004 to October 2005	25.0	5.1¢/KWh	5.0¢/KWh

The selling of off-peak power at prices below 1¢/KWh to either SEP or export customers may be opposed at a General Rate Application hearing by some interveners. If below average hydraulic conditions ensued following significant off-peak sales, the reduced storage could lead to a future shortage in energy supply, which, potentially, may have to be offset with higher priced energy imports.

The Board takes some solace from MH's assurance that the off-peak sales at prices below 1¢/KWh generally occur when there would otherwise be spillage. To the extent that this occurs, the power cannot otherwise be stored, and the revenues do not represent a risk to future supply.

However, at the next General Rate Application hearing, the Board and interveners may explore the impact that such pricing may have on other sales. Further, the Board is concerned that there may be times when these sales are occurring in an environment where storage is possible. The Board will want to assure itself that Manitoba is not receiving short term gains at a longer term cost, the latter from higher import prices when water levels are low and storage has been depleted.

The Board has also considered MH's assertion concerning customer notice. The Board will not order cancellation of the program without due consideration of the notice period. However, modifications may be possible that will not compromise SEP continuance. Further, given that this Order provides a continuance of an existing program, limiting the extension to 2007 should not impact MH's existing SEP customers.

The Board will therefore deny extension beyond October 31, 2007 ahead of the opportunity to fully test the related issues at the next General Rate Application hearing.

The Board accepts the extension to October 31, 2007 based on the following understandings:

1. SEP allows domestic customers to purchase surplus power at the same price/service levels as export customers;

2. SEP provides for displacing alternative fossil fuels for above normal heating needs and displacing diesel or gasoline self generation loads with hydroelectric power;
3. SEP supports domestic industrial activity;
4. SEP's displacement of alternative energy supply minimizes CO<sub>2</sub> and other emissions; and
5. SEP has been financially positive for MH and is expected to continue to be so in the foreseeable future.

At the next General Rate Application hearing, the Board will test the hypothesis that a threshold price for export sales, and hence SEP sales, below which sales would not occur, could be implemented and be in the public interest.



**5.0 IT IS THEREFORE ORDERED THAT:**

1. The extension of the Surplus Energy Program is approved, to the earlier of October 31, 2007 or an application to amend by Manitoba Hydro.
2. Manitoba Hydro is to include a review of the Surplus Energy Program in its General Rate Application filing, due no later than August 1, 2007.

THE PUBLIC UTILITIES BOARD

“Graham F. J. Lane, C. A.”  
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Chairman

“G.O. Barron, C.G.A.”  
\_\_\_\_\_  
Acting Secretary

Certified a true copy of Order No. 173/06  
issued by The Public Utilities Board

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Acting Secretary