

Manitoba Hydro Application to Review and Vary Order 99/11

Background and Relief Sought

Manitoba Hydro filed a General Rate Application (GRA) with the Public Utilities Board ("PUB") on December 1, 2009 requesting approval of a 2.9% rate increase to be effective April 1, 2010 and a further 2.9% rate increase to be effective April 1, 2011. In addition, in accordance with PUB directives, Manitoba Hydro filed a large volume of information supporting "an in-depth and independent study of all the operational and business risks facing the Corporation."

Due to the unprecedented length of the hearing process, Manitoba Hydro's application for rate increases was dealt with by means of interim orders. On March 26, 2010, the PUB issued Order 30/10 approving, on an interim basis a 2.9% general rate increase effective April 1, 2010. On March 30, 2011, the PUB issued Order 40/11 approving a further 2.0% general rate increase, effective April 1, 2011. During final submissions, Manitoba Hydro requested that these rate increases be approved on a final basis and further requested the PUB approve a 0.9% increase (as per the Corporation's original application) effective August 1, 2011, with no retroactivity.

On July 29, 2011, the PUB issued Order 99/11. Order 99/11 is described to be an interim order, and continues the interim rates approved effective April 1, 2010 and April 1, 2011 and denies Manitoba Hydro's request for a further rate increase of 0.9% effective August 1, 2011, also on an interim basis.

Pursuant to Rule 36 of the PUB's Rules of Practice and Procedure, Manitoba Hydro requests that the PUB Review and Vary Order 99/11 so as to approve on a final basis the following:

1. 2.9 % general rate increase effective April 1, 2010 which Order 33/10 approved on an interim basis;
2. 2.0 % general rate increase effective April 1, 2011 which Order 40/11 approved on an interim basis;
3. 0.9 % general rate increase, effective forthwith following the issuance of the PUB's Order with respect to this application; or in the alternative, denial of Manitoba Hydro's application for a further rate increase;
4. Interim ex parte orders related to the Surplus Energy Program;
5. Ex parte orders related to the Curtailable Rate Program;
6. Order 126/09 related to Temporary Billing Demand Concessions.

Grounds for Review and Vary:

Order 99/11 found that the Manitoba Hydro did not meet the onus of proof in failing to provide 1) export contracts 2) exhaustive alternate development scenarios and 3) an IFF10 updated for more current export prices, collectively referred to as the "Additional Information". In issuing Order 99/11, the PUB has essentially made a non-decision, the purpose of which is not clear.¹ The PUB has also made statements that, in Manitoba Hydro's view, are non-constructive and not in the public interest.

The PUB's reasons for not exercising its statutory mandate in Order 99/11 are flawed in that:

¹ While Order 99/11 might be interpreted as having been issued in response to Manitoba Hydro's request for a .9 % rate increase effective August 1, 2011, historically the PUB has allowed proposed effective dates to lapse on numerous occasions while continuing its deliberations, without the need to issue an order which has no practical effect.

- A. The Additional Information² requested is beyond the jurisdiction of the PUB;
- B. The Additional Information is not relevant to the 2010 and 2011 test years; and
- C. The PUB had sufficient evidence in the extensive record associated with this proceeding upon which to base its decision;
- D. In numerous instances, the PUB misunderstood or misinterpreted the evidence and relied on information and analysis not on the evidentiary record of the proceeding which the PUB created itself, and which has not been tested and is flawed.

Analysis and Discussion:

1. The Additional Information which the PUB seeks is for purposes which are clearly beyond the PUB's jurisdiction.

The PUB asserts in Order 99/11 that Manitoba Hydro has:

...either refused or failed to provide the Board information that the Board considers critical to it reaching a comprehensive and final perspective on the prudence of MH's actions and plans, and the implications for domestic rates of MH's operations and plans. (p. 4).

The Manitoba Court of Appeal has already made clear that the prudence of Manitoba Hydro's capital plans are not matters for the PUB's consideration.³ The PUB is well aware of this decision. In these circumstances it is difficult to comprehend how the PUB can rationalize deferring finalization of modest rate increases on the basis that it needs to opine on the "prudence" of the Corporation's capital plans.

² Given the issue of the PUB's ability to subpoena export contracts is presently before the Courts, Manitoba Hydro will not address the issue of export contracts in its Review and Vary Application

³ Manitoba (Public Utilities Board) v. Manitoba (Attorney-General), [1989] M.J. No. 491 "On the basis of the legislation as it stands, the Board has no jurisdiction to approve, reject or vary Manitoba Hydro's major capital projects such as construction of new generating power stations or transmission lines."

The implications of Manitoba Hydro's plans upon current rates, if any, will be discussed in greater detail below, however it is worth noting at this juncture that the Corporation's current GRA sought rate approval in the near term, 2010/11 and 2011/12. Nevertheless, recognizing that Manitoba Hydro operates a business that requires long term planning, the Corporation filed information such as a 10 and 20 year IFF, the Load Forecast and a recently developed a version of the Power Resource Plan for rate review purposes. This information was provided to give the PUB an overview and general understanding of Manitoba Hydro's future development plans. Manitoba Hydro provided evidence of the cost of its Preferred Plan. An alternative plan was also provided, not for the purpose of seeking approval of the Preferred Plan but rather to make obvious that regardless of the path ultimately selected, there is no "do nothing" option.

Even if one were to ignore the PUB's own admission that they seek the Additional Information for the purpose of testing the prudence of Manitoba Hydro's capital plans, and consider whether the PUB requires the additional information to satisfy themselves that rates are on the right track to meet future capital plans, the PUB has all the information and more, to do so. (See 4. Below)

2. The evidence which the PUB seeks will be available when the Corporation submits its capital plans at the NFAAT hearing.

Order 99/11 states:

"...one scenario among others that the Board wants to be modeled involves the deferral (potentially partial, and potentially to represent a staggering of elements of MH's current capital development plan) of the Corporation's current major development plan along with the modeling of the expected consequences of a combined cycle natural gas generation plant in southern Manitoba." (p. 4).

"The Board is not satisfied that MH has explored all reasonable power resource scenarios.... In particular, the Board finds it troubling that MH has not explored in any depth natural gas (CCCT) thermal generation supply alternatives to the new major hydraulic generation and transmission projects now planned for MH." (p. 87)

As part of the NFAAT process, Manitoba Hydro expects to file information related to its Preferred Development plan as well as viable alternative development

plans. Based on its review of this information, the NFAAT panel will make its recommendations to the Lieutenant Governor in Council who bears ultimate responsibility for approving new generation.

While it is not the PUB's role to direct which scenarios ought to be considered, Manitoba Hydro wishes to note that the Corporation considered an alternative plan employing a Combined Cycle Combustion Turbine, but that this alternative was not considered the best alternative to the Preferred Plan. The PUB's statement that that Manitoba Hydro has ignored the competitive position of CCCT generation in the MISO market⁴ is incorrect and not supported by the evidence:

MR. BOB PETERS: Why is it that there more than one (1) or two (2) alter – or possible Power Resource Plans, Mr. Surminski? Why do you evaluate as many as seven (7) to ten (10)?

*MR. HAROLD SURMINSKI: Because there is many – well, some of the – some of the options are variations and timing. They may be Keeyask and Conawapa, but one (1) may be Keeyask only, one (1) may be Conawapa only, different combinations of export sale, different – having wind energy in at a lower level or a higher level, or **another option may be a thermal development sequence with no hydro, just going forward and – and looking at alternative development through thermal resources or purchase resources.***

MR. BOB PETERS: I take from that answer, Mr. Surminski, that the Corporation makes some assumptions that some of the future plans may change from – in the different scenarios?

MR. HAROLD SURMINSKI: Yes, very much so.

MR. BOB PETERS: And by way of an example some of the term sheets may not be consummated into binding contracts?

MR. HAROLD SURMINSKI: Yes, that's one (1) of the possibilities.

MR. BOB PETERS: Is that the major possibility?

*MR. HAROLD SURMINSKI: As far as being drastic changes in the resource plan, yes, the – the new term sheets, for example, are major sales and they would be the most significant. What I also did not mention is **in our alternatives we study, when we do the thermal or purchase alternative we – that's reflective of the least capital. We – we study a case where the least capital is required to expand and – and as – have that as – as one (1) of the reference points because hydro developments are capital intensive versus others that could be much less capital intensive.** (tr. P. 1537 – 1538)*

⁴ See Order 99/11, p. 87

[emphasis added]

Manitoba Hydro notes that Board Counsel put the PUB's theory that Manitoba Hydro should be developing more thermal resources directly to ICF witness Judah Rose. Mr. Rose's expert opinion was:

... We're about 60/90 miles from the US border and you're sitting on a system that's got 1 and 2 percent hydro, so—and it's summer peaking, decidedly so.

So it seems to me like—plus you get the added benefits of the tra—from the transmission of being able to avoid off peak sales. You get the added—so you get the premium dollar for your energy, plus you prevent the possibility that you—your system be—your access to the United States be re-rated as –non-firm. And again that's a concern, effectively non-firm, because of the consequences of the outage of one (1) of the lines that I just referred to. (tr. p. 2751)

No witness filed evidence promoting a gas alternative, nor would one expect this to occur in the context of a rate review. In fact all Intervenors appeared to accept that consideration of such issues is not, under current legislation a matter for PUB consideration:

...the Board is right to be concerned that MH's proposed development plan is yet untested. However, there is a process to test this plan and the regulatory process, including necessary environmental proceedings, cannot ultimately proceed unless the benefits can be clearly demonstrated and substantiated in the Needs For And Justification review.(CAC/MSOS closing submission, tr. p. 8411)

In closing submissions, counsel for CAC/MSOS suggested the PUB's real issue is jurisdictional:

The real issue is therefore the outstanding concern of the PUB and others that is precluded from reviewing Manitoba Hydro's capital programs, including that part of the program that deals with the funding for studies regarding the need for future capital projects. (tr. p. 8417)

The PUB's long standing dissatisfaction with its legislated jurisdiction does not justify the issuance of opinions on matters outside its jurisdiction, nor withholding the exercise of its statutory mandate, approval of rate changes, pending receipt of out-of-scope information. It is neither practical nor appropriate for the PUB to

withhold approval of rate increases pending the production of information properly before an NFAAT panel.

By letter to the PUB dated May 20, 2011⁵, Manitoba Hydro took issue with the PUB posing questions to its Independent Consultants related to the "wisdom" of Manitoba Hydro's capital plans. Manitoba Hydro informed the PUB that the evidence presented during the rate application process was significantly less comprehensive than the evidence Manitoba Hydro would put forward in an NFAAT hearing and that it would not be possible to secure a meaningful understanding of Manitoba Hydro's capital plans without such expanded evidence. Manitoba Hydro also warned of the negative impacts premature comments could have on the Corporation. Manitoba Hydro can advise that it is apparent U.S. competitors are already attempting to use the PUB's comments to lobby for their products in the U.S. marketplace.⁶

3. The Additional Information is not relevant to the rate changes requested by Manitoba Hydro for 2010/11 and 2011/12

⁵ Exhibit MH-149

⁶ See "Excelsior Energy Project Is an Important Energy Option for State" Duluth News Tribune, August 24, 2011 Julie Jorgensen and Tom Micheletti (co-CEOs of Excelsior Energy, Inc.)

...We believe the economy will turn the corner; and when it does, the state will need clean, domestic energy supplies to power the recovery.

Meanwhile, Minnesota's electric supply options are shrinking. The low-cost coal plants, surplus hydro and nuclear resources that have kept rates low in the past, can't be relied on for our future. Many old coal plants currently serving Minnesota are expected to be shuttered in the next five years because they can't meet new pollution-control requirements.

The hydroelectric power that Minnesota utilities have been planning to import from Canada may not come to fruition, as the costs and feasibility of the proposed new dams were brought under attack in a July report by the Manitoba Public Utilities Board. The cost of complying with nuclear regulations is on the rise after the nuclear crisis in Japan. Wishing that wind and conservation were enough is not a robust plan for the future.

We are proud to lead a small Minnesota business trying to put people back to work...

Order 99/11 characterizes the Additional Evidence as “critical” to understanding the implications of Manitoba Hydro’s operations and plans on domestic rates (p.4). This is directly contrary to the evidence on the record:

It’s not necessary to pick which scenario’s most likely to arise to know whether the 2.9 percent rate increases we’re talking about are needed today. So that can give a certain level of comfort that in the -- in—in terms of the – the first decisions that need to be made, it doesn’t hinge on figuring out which of these arise. (Bowman tr. p. 7344, l. 20)

When you look at the plans and where they vary in terms of their spending or in terms of the dates at which they impact things or the dates at which they bring the major resources on over the next two (2) decades, they’re—they’re imperceptible differences in—in the IFF in the context of making a decision for the next two (2) years. (Bowman tr. p. 7388, l. 15)

The evidence was clear that the costs of new generation do not impact rates until the plant is in service:

MR BOB PETERS: Then what you’re telling the Board is that some of the capital costs for Wuskwatim have already been paid for before today.

MR VINCE WARDEN: Not paid for. It doesn’t get into rate base until such time as—as we put the plant in service. We’re talking about cash versus—versus expense. (Tr. p. 1486)

The evidence the PUB seeks is clearly not “critical” to near term rate approvals.

4. The evidence filed is comprehensive and meets the onus of proof.

Order 99/11 states that Manitoba Hydro has failed to discharge the onus of proof to fully and adequately support the requests made. (p. 3) To the contrary, the evidence filed by Manitoba Hydro in this proceeding is unparalleled in terms of volume, topic and depth of inquiry when compared to previous GRA’s. It is of note that no Intervenor objected to the finalization of the April 1, 2010 2.9 % rate increase.

Over the course of the 20-month period between December 2009 and July 2011, an unprecedented amount of material was filed with the PUB. In excess of 40 binders of information were filed, including responses to in excess of 5000

Information Requests. A public hearing was held over the course of 43 days, during which time Manitoba Hydro's panel of witnesses testified for 22 days and its expert consultants a further six days. Manitoba Hydro also filed 145 responses to undertakings. In addition, the PUB retained Independent Experts who testified over the course of five days and three Intervenors presented a total of eight witnesses who testified over the course of six days.

Manitoba Hydro attempted to cooperate with the PUB using the widest possible latitude when assessing whether it could respond to a particular information request, and went beyond what was legally required of the corporation. Unfortunately applying a test based on what information can be released into the public domain without harming the public interest (as opposed to a legal based relevance test) appears to have been interpreted as an invitation to abandon all jurisdictional lines. There are certain jurisdictional lines that must be respected, particularly where the matter falls squarely within the domain of another regulatory or government process.

Manitoba Hydro further observes that it did in fact provide extensive evidence with respect to its financial results, forecasts and sensitivity analyses:

- Appendix 5.2 - IFF09 – Retained Earning Impacts only / Appendix 14 Consolidated IFF09 10 Year forecast – Income Statement, Balance Sheet, Cash Flow Statement
 1. +1% interest rates
 2. -1% interest rates
 3. Canadian \$ down \$0.10
 4. Canadian \$ up \$0.10
 5. Low export prices
 6. High export prices
 7. 5 year drought
 8. Medium-high Electric Load Forecast
- Appendix 15 Consolidated IFF09 20 Year forecast – Income Statement, Balance Sheet, Cash Flow Statement
 9. Low export prices
 10. High export prices

- 11. 5 year drought
- 12. Median flow revenue
- 13. Periodic low water flows
- 14. Alternative development sequence
- PUB/MH I-200 a-g Electric Only IFF09 20 Year forecast – Income Statement, Balance Sheet, Cash Flow Statement
 - 15. Median flow
 - 16. Periodic Low Water Flow (Median Flow Base Case)
 - 17. 5 year Drought (2012-16 & 2022-26)
 - 18. Medium-high load forecast
 - 19. Water Rentals Doubled
- PUB/MH I-210 b Consolidated IFF09 20 Year forecast – Income Statement, Balance Sheet, Cash Flow Statement
 - 20. Interest Rates at 9.10% by 2013/14
- Appendix 76 - IFF10 – Retained earnings Impacts
 - 21. +1% interest rates
 - 22. -1% interest rates
 - 23. Canadian \$ down \$0.10
 - 24. Canadian \$ up \$0.10
 - 25. Low export prices
 - 26. High export prices
 - 27. 5 year drought
 - 28. Capital Expenditures +\$100M per year
 - 29. Medium-high Electric Load Forecast
- Pre-ask 3(a) IFF10 10 year forecast – Income Statement, Balance Sheet, Cash Flow Statement
 - 30. Low export prices
 - 31. High export prices
- Pre-ask 4 Electric Only IFF09 20 Year forecast – Income Statement, Balance Sheet, Cash Flow Statement
 - 32. MH recommended development sequence PUB average prices
 - 33. Alternative development sequence PUB average prices
- MH Exhibit #154 - OL10-2 – Retained Earnings impacts
 - 34. High Domestic Load Growth
 - 35. +1% interest rates
 - 36. -1% interest rates
 - 37. Canadian \$ down \$0.10

- 38. Canadian \$ up \$0.10
- 39. Low export prices
- 40. High export prices
- 41. 5 year drought
- 42. Capital Expenditures +\$100M per year

As explained in more detail below, this information was more than sufficient to allow the PUB to discharge its responsibilities and there was no need for the PUB to create its own analysis.

5. *The PUB misunderstood or misinterpreted the evidence with respect to a number of topic areas or alternatively has relied on theories not in evidence and which parties have not been afforded the opportunity to test through the established evidentiary process :*

a) *The ability of projected export revenues and domestic rate increases to recover costs*

Order 99/11 states:

The Board suggests that the cumulated rate increase required of domestic customers would, by fiscal 2025/26, be significantly greater than the approximately 60% forecast (by MH) and, more probably, the cumulated rate increase in 2025/26 could be in the 100% to 120% range (roughly double MH's forecast)." (p. 100)

There is absolutely no evidence to support the statement that that cumulative rate increases by 2025/26 could be roughly double Manitoba Hydro's forecast. The PUB elected to create its own alternative export pricing scenarios and developed its own evidence regarding Domestic Revenue Requirements and Rate Implications⁷ upon which it based its comments. Unfortunately this information is untested and inaccurate.

⁷ See Chart 2, p. 96 of Order 99/11 and Chart 3, p. 98 of Order 99/11

The PUB's calculations have not been disclosed however it appears that they have attempted to derive a revenue requirement by some means of back calculating the additional revenue requirements from the PUB export price scenario set out in Pre-Ask 4 together with the additional revenue requirements from the updates of the capital estimates of Keeyask, Conawapa and Bipole 3 and added these amounts to the revenue requirements contained in IFF09. The PUB goes on to extrapolate the potential rate increases that would result from such an incremental analysis.

How the PUB arrived at these figures is not evident. Manitoba Hydro filed an updated 20 Year Outlook IFF10 (OL 10-2)⁸ which incorporated all of the updated capital costs (including Bipole 3). Manitoba Hydro also filed alternative financial statements based on the PUB developed alternative average annual prices for exports and imports⁹. While the source of the information the PUB used to develop its analysis is unknown, it is clear that the PUB did not use the information it requested of Manitoba Hydro and the analysis undertaken by the PUB has not been tested.

A fundamental flaw in the PUB's analysis is readily apparent. IFF09 had a 51% equity ratio by 2029 which is far in excess of Manitoba Hydro's 25% equity target. As such there is significant latitude for cost increases or revenue decreases before Manitoba Hydro would have to resort to additional rate increases. An analysis based on a pure incremental approach creates an unrealistic scenario where Manitoba Hydro would be asking for higher than 2% rate increases between 2022 and 2029 when its equity ratio is well in excess of its target. The outrageous claim that Manitoba Hydro's rate increases may have to be double that forecasted by Manitoba Hydro to compensate for lower export prices and higher capital costs is based on patently flawed analysis as opposed to

⁸ Exhibit MH-154

⁹ Exhibit MH-158

information which the Parties have had the opportunity to test and comment on during the course of the proceeding.

The PUB did not have to resort to developing its own scenarios of the rate impacts of higher capital costs and lower export prices had it used and followed up on the information provided by Manitoba Hydro during the process. The PUB asked for an updated IFF based on more current export prices in PUB/MH/Risk 53 and the original PUB/MH/Pre-Ask 4 and in both circumstances Manitoba Hydro indicated that it was impossible to update its export price forecasts for more current natural gas prices given the price forecasts are provided by external experts that consider many variables in their export price recommendations¹⁰ and directed the PUB to various Low export price scenarios that had been filed in Appendix 14 (IFF09), Appendix 15 (IFF09 20 Year Outlook) and in PUB/MH/Pre-Ask 2 (OL10-2) that were indicative of the scenario the PUB was concerned with (low export prices as a result of low natural gas prices, poor economic conditions, lack of carbon legislation in the US etc).

OL 10-2 demonstrated that if one assumes low export prices (instead of expected export prices) Manitoba Hydro's equity ratio would deteriorate from 31% to 20%.¹¹ In contrast, the PUB's Charts 2 & 3¹² concluded that if one considered the impact of higher capital costs and lower export prices on IFF09, the required rate increases would have to be between 108% and 121% to 2026 as compared to the 57% in IFF09. This appears to be the basis for the erroneous statement that rate increases would have to be roughly double what Manitoba Hydro is projecting. If however one were to base its analysis on the Low Export price scenario on the record of the proceeding (OL10-2) and goal seek what the required rate increases are to get back to the same retained earnings and equity ratio as set out in OL10-2, one would find that the projected

¹⁰ See also Manitoba Hydro's response to Undertaking #80 – Exhibit MH-82

¹¹ See page 22 of Exhibit MH-154

¹² p. 96 and 98, Order 99//11

rate increases to 2026 are nowhere near the “100% to 120% range” referenced by the PUB.

The above analysis demonstrates not only that the PUB did have sufficient information on the record to assess the impact of lower export prices (on years well outside the test years) but also the dangers of relying on untested evidence and unsophisticated calculations. This practice is contrary to the principles of natural justice:

If adjudicative decision-makers are permitted to unilaterally conduct their own investigations, the ability of parties to participate in the decision-making process through presentation of proofs and argument to neutral decision makers may be impaired in three distinct but related ways. First, to allow a tribunal to gather evidence outside the hearing would defeat any legal requirement that the tribunal hold hearings in the presence of parties or in public. Second, for a tribunal member to conduct a clandestine investigation for the purpose of providing material for questioning a witness may constitute bias in the sense that a person discharging an adjudicative function should not appear to enter the arena as a party. Third, it is a breach of the audi alteram partem principle for a decision-maker to base a decision on information that has not been disclosed to the party adversely affected, or if it has been disclosed, done in such a manner as not to give the parties a fair opportunity to rebut it.¹³

There is therefore no legal or practical justification for delaying rate determinations based on conclusions drawn from the untested and flawed analysis found in Charts 2 and 3 in Order 99/11.

Order 99/11 also states:

It is far from clear for the Board Whether MH's proposed new export arrangements can be expected, if not assured, to generate enough additional revenue to fully meet the cost of advancing new generation ahead of domestic need, or whether, in the end, domestic customers will end up subsidizing exports to the U.S. (p. 77).

The Board gained the understanding that the approximate cost of creating and supplying the energy to service the planned export contracts from major new generation projects is estimated to be in excess of 10¢ per kW.h. However,the expected export prices, which include not only firm energy obligations and opportunity export sales, may not in aggregate, be sufficient to cover the cost of advancing the projects ahead of domestic demand, leaving a

¹³ Judicial Review of Administration Action in Canada, Brown & Evans, V. 3, p. 12-3 – 12-4

financial shortfall to be reflected in the rates of domestic ratepayers (that being in addition to the rate increases currently forecast by MH). (p. 79).

Despite evidence to the contrary given on several occasions, the PUB persists in its conclusion that it is appropriate to compare the first year costs incurred in operating a generating station with the expected revenues, rather than considering the costs and revenues over the life of the generating station. Manitoba Hydro witnesses explained that the appropriate methodology to compare the cost of one generation option to another is the "levelized cost" method. Under this methodology, which is commonly used in the utility industry, the capital costs are expressed as the equal annual amount required to amortize, with interest, the capital investment over its useful life.¹⁴ On a levelized cost basis, the unit cost of energy for Wuskwatim new generation is 7.47¢/kW.h.¹⁵

The PUB, however, did not appear to accept the levelized cost approach and preferred to calculate their own cost per kW.h based on the impacts on the income statement (i.e., on customers) in the first year of operation. On this basis, the PUB calculated the cost for Wuskwatim to be 10¢ per kW.h in the first year of operation.¹⁶

Manitoba Hydro did not accept the PUB's calculation and submitted an undertaking showing that the first year income statement impact of Wuskwatim would actually be 6.7¢ per kW.h (Exhibit MH-115). After the first year of operation, the cost charged against the income statement would gradually decline as the book value decreases and the associated financing costs are proportionately reduced.¹⁷

For comparative purposes, the first and fifth year income statement impacts of planned new generation facilities are projected to be as follows:

¹⁴ See evidence of MH witness Vince Warden, tr. p. 2249

¹⁵ See evidence of MH witness Vince Warden, tr. p. 2252

¹⁶ Tr. p. 2236

¹⁷ See evidence of MH witness Vince Warden, tr. p. 2237

	<u>1st Year</u>	<u>5th Year</u>
Wuskwatim	6.7¢	6.5¢

As indicated above, the income statement impact is lower than the levelized cost method which is counter-intuitive. The reason for the lower income statement impact is that a portion of the funding for the construction of generation and other capital facilities is derived from internal sources and, therefore, associated financing costs are avoided.¹⁸ For example, during the construction of Wuskwatim, 35% of the funding was derived from internal sources.¹⁹ There is, however, an opportunity cost associated with internally generated funds, and, for this reason, the levelized cost method is the superior and most consistent method for assessing the relative cost of new facilities.²⁰ The income statement method requires the application of assumptions which, as evidenced by the incorrect conclusion derived by the PUB, detracts from its accuracy and objectivity. No witness supported the methodology used by Counsel for the PUB and which is adopted in Order 99/11:

and you will recall I did have a discussion with Mr. Peters, and while I did agree with the arithmetic that Mr. Peters was using for purposes of deriving the ten (10) cents, I certainly didn't agree, or certainly didn't intend to imply that I was agreeing, with the methodology.

And I do want to make it clear that the -- the correct methodology, as far as Manitoba Hydro is concerned, in terms of determining what the costs of generation is is -- is the levelized-cost method -- methodology. And we have put on the record that the levelized costs of Wuskwatim, the unit costs of Wuskwatim, is seven point four (7.4) cents per kilowatt hour. And Keeyask and Conawapa were also put on the record. And that is what is typically used for purposes of comparing one generation source to the other, so when we look at the economics of new generation, we look at the levelized costs over the life of that -- of that generating facility.²¹

As MIPUG's witness testified, a long term, as opposed to first year perspective is preferable:

MR. BOB PETERS: Well, let me -- let me put it this way, rather than your thinking out loud, Mr. Bowman. You'd have no alternative but to pay any

¹⁸ See evidence of MH witness Vince Warden, tr. p. 1464 and p. 5565

¹⁹ See Exhibit MH-115

²⁰ See evidence of MH witness Vince Warden, tr. p. 5564 - 5570

²¹ MH witness Vince Warden tr. p. 5565 – 5566, see also MIPUG evidence at tr. p. 7544

associated cost increases due to Wuskwatim coming on when it does, and the export revenue from Wuskwatim not returning the full per-unit energy cost?

MR. PATRICK BOWMAN: Well, you do have an alternative, and it's the same alternative we talked about in the context of Limestone. You have an alternative to look over the long horizon and to ensure that Hydro's rate regime is -- is stable and reflects a transition to the cost of resources used to serve domestic load. In '92, this Board had an alternative in respect of Limestone, and it was to put in place a stable rate-change regime that didn't burden people just because Hydro was experiencing a Limestone loss.

MR. BOB PETERS: So the options are either rate increases through this Board or no rate increases through this Board and let the retained earnings erode.

MR. PATRICK BOWMAN: Well, let the project's economics unfold over the long term. We don't see the retained earnings eroding, we see the retained earnings increasing every year, with rate increases that are -- that are still in a range that one would call reasonably stable. It's not like there's a -- a rider on someone's bill to say, Here's the portion where we pay the Wuskwatim shortfall. This is, you know, this -- a similar type of situation, like I said, I've seen in other jurisdictions, where you deal with -- you deal with rates and -- and you deal with projects that -- that have a crossover, and in the early years they're -- they're unable to cover all of the costs, but you address them over some horizon where they -- they -- the long-term economics of the project work for it, just like what was done with Limestone. (tr. p. 7541 – 7543)

As noted by Mr. Bowman in the above quotation and confirmed by Mr. Warden below, the evidence is clear that Manitoba Hydro is not asking ratepayers to fund any short term differentials through rates:

MR. BOB PETERS: ... But you've suggested to the Board that the spread between the, seven point five five (7.55) is the number we've used, cost for Wuskwatim and the five point seven (5.7) fixed price of energy, that spread that is being subsidized by Manitoba ratepayers, you expect that to narrow by the time Wuskwatim comes on -- in service in -- in a couple of years?

MR. VINCE WARDEN: It -- it will not only narrow, but the -- the -- the revenue will quickly overtake the costs. And recognize, too -- it should be recognized, too, Mr. Peters, we're not asking ratepayers to provide that differential; we're only asking for a modest 2.9 percent rate increase at this time. So we're certainly not looking for ratepayers to pick up that differential in rates in those intervening years before the plant turns to profitability.

MR. BOB PETERS: Well, you're -- you might be right in your intent, but you're asking for two point nine (2.9) plus two point nine (2.9) in this application, correct?

MR. VINCE WARDEN: Yes, the interim approved two point nine (2.9) plus the 2.9 percent to be to be effective April the 1st, 2011

MR. BOB PETERS: And if that -- if those rate increases aren't sufficient to maintain the debt- equity ratio at 75:25 because of Manitoba Hydro's investments in three (3) major new assets, then the debt-equity ratio will deteriorate?

MR. VINCE WARDEN: Yes, as we see in our financial forecast, but again, we're not asking ratepayers to pick that up because we know that the future -- that debt ratio will recover. (tr. p. 2283)

With respect to the sufficiency of revenues from export contracts, KPMG concluded as follows²²:

- Manitoba Hydro has made appropriate strategic choices on entering into long-term fixed-priced contracts for export power sales;
- Manitoba Hydro has appropriately established the firm export volumes in these contracts; and
- Manitoba Hydro has an appropriate methodology for arriving at the sales price in such contracts.

Similarly, in its report entitled "Independent Review of Manitoba Hydro Export Power Sales and Associated Risks," ICF Consulting concluded as follows²³:

- Manitoba Hydro's proposed export contract prices are well above average existing contract prices, i.e., more than 50% higher; and
- Manitoba Hydro's proposed export contract prices are well above domestic rates for generation services, i.e., nearly three times as high.

An NFAAT panel was charged with assessing the merits of Wuskwatim and will do so again for Manitoba Hydro's future development. Not only is this not the PUB's role, but they have used an improper methodology, ignored the evidence

²² KPMG External Quality Review p. 276

²³ ICF Report p. 11

of both the Corporation and expert witnesses and relied on information for which there is no evidentiary basis.

b) Reliability of Manitoba Hydro's export sale forecasts:

The PUB made a number of statements suggesting that it misunderstood the process for updating financial forecasts and the impact of near term conditions on long term forecasts:

In the Board's view, MH's export price assumptions are not reflective of the current and likely near-term energy market. As such, the suggested progression of rate increases for domestic customers may well not be adequate to cover, even after taking into account projected additional export revenues, the costs of MH's Major Capital Expenditure Program. And, when the latest major project cost escalation is considered, the potential revenue insufficiency appears to be substantially magnified. (p. 99)

Overall, the Board does not accept MH's export revenue forecasts to-date as representing a realistic basis for determining the economic viability of MH's proposed new major generation and transmission facilities to be supported by export sales in advance of domestic load requirements. (p. 100)

While it is correct that natural gas prices are at close to historic lows and this is having an effect on short-term opportunity prices, uncontroverted evidence confirmed that low natural gas prices have little if any impact on the prices that counterparties are willing to pay for long-term firm power from Manitoba Hydro:

-- when you include the all-in costs Manitoba Hydro's long-term price is -- is -- is appropriate and it is competitive, but it is not anywhere near the depressed prices that we're seeing in the market today; it's significantly higher and very advantageous for -- for Manitoba Hydro.

So I -- I don't put a lot of weight on what's happening in the current year or next year. Those conditions will pass and companies are really looking about what their long-run in -- incremental costs are. And has -- it has very little to do with today's situation....(MH witness David Cormie, tr. p. 1202 - 1203)

Power production from natural gas still results in greenhouse gas emissions, albeit at a much lower quantity than coal-fired power generation. Manitoba Hydro's customers in Minnesota and Wisconsin are willing to pay for the

environmental attributes associated with hydro-produced power.²⁴ Manitoba Hydro remains very confident that domestic ratepayers will not be subsidizing export sales and that the benefits of export sales to domestic ratepayers will remain strong.²⁵

With respect to the impacts of low natural gas prices on opportunity sales in the export market, Manitoba Hydro will determine the impacts based on its analysis of the forecasts provided by external consultants who are engaged by the Corporation for the specific purpose of providing export power price forecasts.²⁶ The consensus forecast of these external consultants will be incorporated in Manitoba Hydro's fall 2011 Integrated Financial Forecast.

c) Appropriateness of capitalizing costs related to Manitoba Hydro's planned capital projects before those projects are approved

Order 99/11 states:

MH has expended hundreds of millions already on its preferred development plan, a plan that has yet to receive regulatory approval. MH continues to spend to protect the in-service dates required to meet the obligations of its new export sales contracts...

... Expending massive funds ahead of final regulatory approval appears to represent speculation, a degree of speculation rarely found with private utilities, let alone Crown Corporations.(p. 80)

Manitoba Hydro takes great exception to the PUB's characterization of spending on capital projects such as Keeyask, Conawapa and Bipole III as "speculation." All expenditures are being incurred in a responsible manner to protect key in-service dates. No witness suggested that Manitoba Hydro's development plans were inappropriate. For example, KPMG's evidence was as follows:

²⁴ See evidence of MH witness David Cormie at tr. p. 1286 and 3957

²⁵ See evidence of MH witness David Cormie at tr. p. 1201

²⁶ See evidence of MH witness Harold Surminski at tr, p. 1254 and Exhibit MH-82 – Manitoba Hydro does not have access to a breakdown of the blended resources inputted into these complex analyses

THE CHAIRPERSON: From your review of Hydro's forecast, results, operations, and models, have you formed an opinion on the advisability of Manitoba Hydro's major capital plans as described and as supported by export sales expectations, the latter represented by export term sheets entered into several years ago?

MR. WILL LIPSON: Okay. My colleagues have elected me to -- to at least do the first pass at that. I think our view is -- is quite favourable. I think again there is a tremendous opportunity here to develop new capacity, have it largely sup -- well, and significantly supported by external customers through the long-term contracts, and to take advantage of -- of the resource that, you know, residents of Manitoba have been blessed with. So, overall, as -- as a basic concept, I - I think you're in a very good position, and there's lots of jurisdictions that would be very enviable of the position you're in. The key, obviously, is to, you know, proceed ahead, and as we discussed earlier, ma -- you know, make sure the costs don't go way out of wack, make sure that the benefits do eventually flow back through, you know, a) good prices in the contracts, and b) you know, for example, not sharing the benefits of that too widely with other parties, of things -- things of that sort that, you know, we've been discussing over the last three (3) days. But, overall, as a -- as a basic strategy, I would say KPMG's very supportive of what we see happening here at Manitoba Hydro. (tr p. 3740-41)

MIPUG's witness testified that:

"...from our view, the power resource plan, including the recommended plan, is credible enough -- it's a credible enough opportunity with enough possible benefits that one would have to advise MH to continue to protect the option to pursue it... that is very different from saying it's the right plan." (Bowman tr. p. 7345).

The PUB misapprehends the evidence of ICF when it found that the witness for ICF acknowledges that increases in the capital cost of Manitoba Hydro's preferred development scenario "invalidated the consultant's earlier estimate."²⁷ In fact there is no evidence of such a conclusion on the record of the proceeding. While Mr. Rose acknowledged his report doesn't take into account certain increases in capital costs after the date of the report, he did not say that invalidated his conclusions. To the contrary his evidence was that the calculations presented by Board Counsel "are incorrect in their fundamental approach to the problem".²⁸

The evidence was clear that Manitoba Hydro's practice of capitalizing costs associated with capital projects is in keeping with accepted industry practice:

²⁷ Order 99/11 p. 32

²⁸ tr p. 2875

So from the per—perspective of gen—intergenerational equity, I have—I have no major—no major concern with the ongoing deferral and capitalization of that . It – it would be standard practice

But from the perspective of intergenerational equity or—or any form of ratepayer equity, the thought that you keep spending material sums towards a project that isn't certain to occur—is unfortunate but absolutely necessary if you're going to make a project work. (Bowman tr. p. 7394-5)

Mr. Williams on behalf of CAC/MSOS summarized the evidence of Mr. Matwichuk:

And you -- at a theoretical level the Board would have heard some evidence from Mr. Matwichuk as well on intergenerational equity, making the point that when one is dealing with major capital projects, Mr Ma -- Matwichuk's argument was that those per -- tho -- the costs should be set against those persons who were expected to benefit from -- from the project. So, to that degree, there is agreement between one (1) of the CAC/MSOS witnesses, Mr. Matwichuk, and Mr. Warden. (Williams tr. p. 8415)

The PUB's concern with respect to the capitalization of cost associated with Manitoba Hydro's capital plans is clearly without an evidentiary basis and is not consistent with industry practice.

d) Reliability of construction costs and frequency of updates

Order 99/11 expresses concern with "MH's infrequent updating of not only its capital cost estimates for major new generation and transmission assets..... it seems inappropriate to make commitments on major projects and large export contracts when the capital expenditure forecast remains unchanged through three or four years of CEF submissions, and when issued financial forecasts do not reflect changing export market conditions." (p. 89).

Manitoba Hydro's evidence was that capital cost estimates are updated on a continuous basis by Manitoba Hydro. The Capital Expenditure Forecast (CEF) at any given time represents Manitoba Hydro's best estimate of the in-service cost of capital facilities. If all assumptions pertaining to future costs, including interest and escalation rates, remain the same, there is no reason to change a capital cost estimate from year-to-year. In these circumstances the annual review of

capital cost for a particular project would not result in the production of a revised CEF nor would further internal approvals be sought as no change to the CEF is contemplated. Theoretically, a capital cost estimate could remain unchanged from the first estimate, throughout the construction period, until the facility is ultimately placed in service. In practice, capital cost estimates are changed whenever the assumptions of future costs change in a material amount (normally \pm \$1 million).²⁹ The evidence was summarized in Manitoba Hydro's final submission:

One of the primary roles of Executive Committee is to challenge recommendations presented for approval and to satisfy itself that all recommendations are appropriately justified. Illustrative of this, and as discussed extensively during this proceeding, a CPJ was prepared proposing significantly higher cost estimates for Bipole III, but this CPJ was not approved by Executive Committee. Not all members of the Executive Committee, including the President and CEO, supported the higher cost estimates for Bipole III. As a result, MH undertook a comprehensive review of Bipole III estimates using external consultants to gain more certainty and confidence in the cost estimates prior to incorporating them in the approved capital expenditure forecast. (tr. p. 8776).

e) Drought Management

Order 99/11 stated:

...there are many areas of MH's Drought Risk Management processes that could be improved upon. (p. 101).

MH should be looking to do better in the future than it did in 2003/04 (p. 102).

The Board recommends MH act to meet the urgent need for such a document. (a Drought Management Plan) (p. 102).

Despite an extensive and protracted process that involved numerous experts, there is still no clear indication of the appropriate level of retained earnings required as a drought reserve. (p. 103)

Manitoba Hydro's management of the 2003/04 drought was reviewed extensively at previous PUB hearings and was the subject of a 2005 report authored by Risk

²⁹ Warden tr p. 5524, MH Final Submission at tr. p. 8774 - 8776

Advisory Services (Tab 13 to MH Risk Filing).³⁰ In its report, Risk Advisory concluded that, "Overall, the Company did an outstanding job in managing the drought." Despite previous reviews, the PUB insists on reviving the circumstances of the 2003/04 drought in a negative manner and without an evidentiary basis to support such comments. There was no evidence, other than the Risk Advisory Report, upon which one could opine on Manitoba Hydro's management of the 2003/04 drought.³¹ Both Dr. Kubursi and Dr. Magee and Manitoba Hydro's panel members confirmed that information on this topic was not discussed in any detail in their meetings hence any conclusions made in the Kubursi /Magee Report in this regard, positive or negative, cannot be relied upon.

Manitoba Hydro does agree that a documented Drought Management Plan may assist the PUB in its understanding power system operations during a drought. A Drought Management Plan is currently being prepared and will be filed with the PUB. It is unfair for the PUB to chastise Manitoba Hydro for not doing so in accordance with its original time estimate of April 1, 2011, given same was made as part of an Information Request long before the realization that the hearing would extend into July, 2011.

Manitoba Hydro has difficulty understanding the PUB's comment that no estimate of the cost of drought was provided or that there is no clear indication of an appropriate level of drought reserve. On page 65 of Order 99/11 the PUB references the fact that Manitoba Hydro projects the financial consequences of a five year drought to be in the range a \$2.0 billion in reduced retained earnings (\$2.4 billion when increased finance costs are considered). KPMG reviewed Manitoba Hydro's methodology for estimating the cost of drought (versus that of the NYC) and confirmed that Manitoba Hydro's methodology was consistent with

³⁰ The PUB incorrectly states that MH did not file an independent risk report regarding MH's actions through the 2003/04 drought. This misstatement was acknowledged in recent Court filings.

³¹ See MH Final Submission, tr. p. 8821

practices at other utilities and did not recommend any changes.³² ICF opined that Manitoba Hydro's quantification of risk exposure to drought is reasonable and recommended that Manitoba Hydro should "maintain at least the cost of an extended five year drought in retained earnings".³³ The Kubursi Magee Report concluded that "The costs of a 5 year drought are in the order of magnitude use by Manitoba Hydro rather than those used by the Consultant".³⁴

In its Final Submission Manitoba Hydro noted that a useful measure of the adequacy of the dollar level of retained earnings is that which is sufficient to withstand the financial impacts of the risks faced by the Corporation. The absolute magnitude of those risks can grow over time depending on the duration or the severity of the risk events and can change relative to the size of the Corporation. In fact, it is reasonable to assume that there is a linkage between the growth in the Corporation's assets and the risks that it faces. As a result, it's appropriate to set financial targets based on a debt to equity ratio which recognizes that fact.³⁵

As noted by Manitoba Hydro, one of the most immediate risks faced by the Corporation is that the economic recovery may take much longer than expected and export revenues will remain depressed for a prolonged period. As export revenues currently account for approximately 30% of Manitoba Hydro's revenues, reductions in exports due to price or volume can have a significant impact on net income and retained earnings. These concerns are real. Given the estimates of a five year drought in evidence, combined with these very real concerns, it is entirely reasonable to approve modest, regular rate increases.

³² KPMG External Quality Review p. 94 – 101 Note KPMG also undertook an analysis of the ability of MH to withstand the consequences of droughts of 5, 10 and 15 years in duration and found that the preferred development plan was more robust in terms of ability to withstand the effects of extended droughts. (tr. p. 8844).

³³ ICF Independent Review of Manitoba Hydro Export Power Sales and Associated Risk, p.24

³⁴ Manitoba Hydro Risks: An Independent Review A. Kubursi & L. Magee Finding 9, p.190

³⁵ MH Final Submission tr. p. 8739

f) Domestic Load Forecast and Keeyask Generating Station

Board Order 99/11 states:

In MH's Recommended Development Plan, (IFF 09-1 assumptions) Keeyask G.S. had an in-service date of 2019/20; in the Board's view domestic load, only, would have required a 2021 in-service date, and now with the reduced domestic load forecasts a 2025/26 in-service date could be more appropriate.

The PUB's comments regarding the impact of "reduced domestic load forecasts" on the in-service date of the Keeyask Generating Station are not based on the Load Forecast filed in these proceedings, but instead a Load Forecast which appears to have been generated by the PUB itself.

Manitoba Hydro's load forecast was viewed positively by the Independent Consultant's Kubursi/Magee:

The combination of survey results, technical and engineering information and regression techniques results in a rich base for the forecasts. The forecasting accuracy is deemed reasonable for the 5 year term and the move to integrate probabilistic forecasts is encouraging. The people responsible for maintaining and running the model are competent, enthusiastic about their work and dedicated. We were impressed with their knowledge and expertise.³⁶

Manitoba Hydro's Load Forecast is produced each year. Annual updates must account for changes in domestic load in all load sectors. It is evident that the PUB's analysis deals only with industrial load and ignores changes in other sectors and the evidence on the record in that regard:

While it is correct that there have been reductions in forecast load for industrial customers, these forecast reductions are significantly offset by increases in the remaining domestic load, particularly increases in forecasts of residential loads. (Manitoba Hydro witness Vince Warden tr. p. 4182)

Further, Manitoba Hydro's Load Forecast provides a range of possible load scenarios at the 10th, 50th and 90th percentiles. Such range would take into account the changes in industrial load identified by the PUB. Manitoba Hydro takes into account the full range of possibilities when developing its future plans. The suggestion that the Keeyask in-service date could be deferred is not supported by the evidence on the record and the PUB's untested analysis is

³⁶ KM Report – Section 3.2.10 - Pg. 116

wrong. New generation, post Wuskwatim, is required to serve the Manitoba load in 2021.

g) Operating, Maintenance and Administration Expenses (OM&A)

Order 99/11 states:

The Board remains concerned with the escalation of operating expense, of which a large portion is being deferred (to be borne by future ratepayers). Such deferral has muted the OM&A increases reflected in MH's annual accounts, its GRA requests and domestic rates. (p. 84).

The Board questions the sincerity of MH's commitment to rein in costs. (p. 85).

The PUB's comments with respect to OM&A appear to ignore the evidence that the majority of the cost increase relates to accounting changes which has resulted in an annual increase to operating and administrative cost of \$30 million since 2007/08, to general cost escalation, and to wages and salaries which constitutes approximately 75% of Manitoba Hydro's operating costs. Wage and salary cost increases are primarily related to the requirement for additional trainees – necessary to hire and train a new generation of workers to replace those that have retired or are expected to retire in the near future – and also to address competitive wage pressures. It is noted at p. 25 of the Order that "(MH testified that it had lost five employees to Saskatchewan Power over the last year, this out of a total complement of approximately 6,700). This is an unfair characterization of the testimony of Manitoba Hydro, in the response to IR's and in oral testimony wherein Manitoba Hydro testified:

"Mr. Warden, before I leave this topic, you've mentioned -- and I'm not sure if you were trying to paint a -- a vision of doom and gloom with a mass exodus out of the province to our neighbours to the west, but have you got any numbers of people that you suspect or can indicate have been migrating from Manitoba Hydro to SaskPower? And before you answer that, PUB Manitoba Hydro First Round 44A is a question where you were asked, or Manitoba Hydro was asked, to identify the number of staff lost year by year to other utilities. And when I look at 2009, it looks like five (5) employees left the province or work locale, and that's the latest year in which you've provided numbers.

MR. VINCE WARDEN: That's right, Mr. Peters, and I think I indicated, with the economic downturn there hasn't been as much risk of that happening

but as soon as the economy turns around -- and we all hope it will -- then those numbers will probably go up again. But you can see in that same IR response that there were seventeen (17) in 2007. So in -- so the numbers at one point got to the -- got to the stage where we were so concerned, we had a -- we had a -- to implement a temporary provision to -- premium to hold employees that were at the highest risk.

MR. BOB PETERS: So a dozen and a half employees leaving in 2007 out of six thousand (6,000) causes the Corporation to enact a retention inducement. Is that what you're saying?

MR. VINCE WARDEN: If they're in -- in those what -- what are called hot skills, absolutely, yes, and --

MR. BOB PETERS: Other than your position, Mr. Warden, what -- what are the hot skills positions?

MR. VINCE WARDEN: Mine isn't one of them, but the lines trades are where we are the most vulnerable. Those are the people that work every day to keep the lights on and the gas flowing and they're very marketable.”³⁷

h) The Role of Bipole III

Order 99/11 states:

MH asserted that Keeyask G.S. cannot proceed without Bipole III being in place. While the primary rationale for Bipole III has been to enhance reliability, MH asserts that Bipole III is also required if Keeyask or Keeyask and Conawapa are to be built.

While there is no doubt Bipole III is required to transmit Conawapa generation, based on the capacity of the current system, existing Bipole I and II transmission appear capable of handling perhaps 80% of the maximum capacity of Keeyask/Kettle/Long Spruce/Limestone Generating Stations. This approach would have been adequate to transmit the entire output of those generating stations in 29 of the last 30 years, and without Bipole III. (p. 33)

Manitoba Hydro believes it important that information regarding Bipole III be accurate and as such wishes to correct the PUB's comments as noted above. Assuming all HVdc transmission components are in service, the existing capacity of Bipole I and II is 3854 MW (Bipole I = 1854 MW, BP II = 2000 MW). The existing Nelson River generation that is transmitted over Bipoles I & II to southern load and existing firm export is 3554 MW (Kettle = 1224 MW, Long Spruce = 980

³⁷ tr. p. 1001

MW, Limestone = 1350 MW). The spare HVdc transmission capacity over existing generation is 300 MW. The HVdc converters are made up of components called valve groups. The Bipole I converter is made of six valve groups, each rated 300 MW. The Bipole II converter is made of four valve groups, each rated 500 MW. Outage data indicates that a Bipole II valve group is out-of-service 12.4% of the time, resulting in a reduction of Bipole II capacity from 2000 MW to 1500 MW, resulting in available HVdc transmission capacity which is 200 MW below generation. That is, 200 MW of generation is bottled up, which will reduce the potential non-firm export revenue. In order to provide firm transmission capacity a valve group of spare HVdc capacity over generation is required.

Adding the Keeyask generation of 630 MW (net) increase the total generation to 4184 MW while the total Bipole I and II capacity remains at 3854 MW. Consequently, potentially a minimum of 330 MW of generation would be bottled up, increasing to 850 MW if a Bipole II valve group is out-of-service. In order to provide firm transmission capacity, a minimum of 850 MW of transmission is required in addition to Bipole I and II.

i) Credibility

Manitoba Hydro witnesses have always strived to provide accurate information. Witnesses do not have perfect recall, they must prepare for the hearing and do so by reviewing materials filed and associated documents. In the past, on the rare occasions where they have misspoken, they have corrected the record and their corrections have been appreciated and accepted. It is thus disheartening to see one such correction documented by the PUB under the heading "Credibility". The PUB is entitled to their views, however if the Board elects to comment on a matter of such high sensitivity in a public Order, it is incumbent on the Board to disclose the full circumstances surrounding the matter. In this case, these circumstances include the fact that the document at issue was not part of the

public record, that the witness was only advised that it would be placed on the record moments before he was called upon to speak to it in oral testimony and that it was the witness himself who interrupted the proceedings (which had by then moved on to other topics) to correct the record. That the Chairman specifically invited all parties to comment on the credibility of witnesses during final submissions and none shared the PUB's concern is also noteworthy.

6. Other Rate Programs

Order 99/11 failed to deal with the remainder of Manitoba Hydro's requests for final approval of the interim ex parte orders related to the Surplus Energy Program ("SEP"), the Curtailable Rate Program ("CRP") and Temporary Billing Demand Concessions.

It is important to note that no party opposed the approval of Interim Orders respecting SEP or CRP rates. In fact, during MIPUG's closing submission, Mr. Hacault stated MIPUG's position as being in support of the approval of the ex parte orders on these programs (tr. pg. 8623) and the rationale for supporting the approval:

The Board can be satisfied that the program provides benefits to customers and is at least revenue neutral to Hydro. Further, Hydro has appropriate conditions in place to limit any potential downside exposure (With re: SEP - MIPUG Final Argument, Written Submission, June 30, 2011 – pg. 11-2)

With respect to the CRP, under the terms and conditions of service, Manitoba Hydro is required to file to adjust the CRP credit for inflation on an annual basis. Order 46-09; 42-10 and 63-11 approved annual adjustments to the CRP Credit on an interim ex parte basis. Hydro's applications and the Board's interim Orders are consistent with the terms and conditions of the program and should be approved. (MIPUG Final Argument, Written Submission, June 30, 2011 – pg. 11-2)

With respect to the Temporary Billing Demand Concession, Board Order 126/09 approved a temporary deferral of a calculated portion of a GSL or GSM customer's energy bill. The Board indicated at page 3 of Order 126/09 that:

The deferral of a portion of the energy bill responds to the impacts of demand billing, that is, where reductions in production mean energy is scaled back, but demand is not, leading to increased unit costs for both energy and production... This approach is towards ensuring that MH's electricity rates structure does not contribute to the financial distress of these large customers. This PUB Order is to assist in reducing the probability of permanent revenue loss (to MH and the provincial economy), and a loss of jobs through permanent plant closure by large customers of MH electricity.

Manitoba Hydro provided the PUB with reports on the number of eligible customers, the number of applying and participating customers, and the affected revenues, energy and demand. The reasons for approval of the Temporary Billing Demand Concessions and Manitoba Hydro's response to issues raised during the course of the hearing were outlined in its closing argument at transcript pages 8902-8909. During closing arguments, Mr. Williams on behalf of CAC/MSOS asked that if the PUB approves Manitoba Hydro's request to make the concessions final, it should do so in express recognition that it is addressing exceptional circumstances (tr. pg. 8531-8532). As indicated in Manitoba Hydro's final argument, this is precisely the nature and intent of demand concessions; that they are intended to address unique and rare circumstances in which a normally good rate is producing perverse results (tr. pg. 8911).

Manitoba Hydro therefore requests that the PUB approve, as final, the interim ex parte orders related to the SEP and CRP programs as set out in Tab 23 of Manitoba Hydro Exhibit #160. Manitoba Hydro further requests that the PUB approve, as final, interim ex parte Order 126/09 related to the Temporary Billing Demand Concessions.

Conclusion

Manitoba Hydro agrees with the PUB's statement that the GRA was "the lengthiest, most complex and certainly most expensive public proceeding held by the Board." (p.7) The process of responding to 5000 plus IR's and providing testimony over the course of six months was extremely taxing. Manitoba Hydro staff made their best efforts to provide the best information available as quickly

as possible. Manitoba Hydro recognizes that there were certain information requests which the PUB viewed as important which the Corporation was not prepared to accommodate however given the effort that went into providing information to the Parties, it is extremely disappointing to see the evidentiary record characterized as deficient.

Despite its disagreement with the PUB regarding the Additional Information, the PUB has the necessary information within the vast record of this proceeding to approve, on a final basis, the interim approved rate increases together with an additional .9% (in accordance with the original application) effective as soon as possible. While Manitoba Hydro fervently disagrees with the PUB's concerns documented in Order 99/11 (and objects to same on the basis that they are based on evidence which the Board has misunderstood or which does not exist on the evidentiary record), virtually all point to a need for higher, rather than lower rate increases than that sought by the Corporation. Manitoba Hydro and the PUB are in agreement in their reluctance to impose retroactive rate increases and the Corporation is not seeking same. As such it would appear appropriate, at a minimum, to forthwith confirm the interim approved rate increases. Ratepayers require certainty and stability and it is their interest to have matters dealt with as expeditiously as possible. It is also in the public interest that the responsibilities of the PUB be discharged without the apparent acrimony contained in PUB Order 99/11.