

**MANITOBA PUBLIC UTILITIES BOARD**

**Needs for and Alternatives to Review (NFAT) of Manitoba Hydro's Proposed Preferred Development Plan (Plan) to Construct the Keyask and Conawapa Generating Stations, their Associated Transmission Facilities and a New Canada-United States of America Transmission Interconnection**

**CLOSING WRITTEN SUBMISSIONS OF  
THE MANITOBA METIS FEDERATION ("MMF")**

**May 23, 2014**

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## I. OVERVIEW OF SUBMISSION

The PUB's review and assessment of the needs for and alternatives to ("NFAT") the Plan is to be based upon evidence submitted by Manitoba Hydro, interveners, and independent expert consultants ("IECs"). The Terms of Reference for the NFAT provided by the Government of Manitoba, lists at items (1) and (2), those areas that the PUB's report to the Minister will address. Of those areas, the MMF called and tested evidence specifically related to (2) (f) the impact on domestic electricity rates; (g) financial and economic risks; (h) socio-economic impacts and benefits of the Plan and alternatives to Northern and Aboriginal communities; (i) macro environmental impacts of the Plan compared to alternatives; and (j) whether the Plan is the highest level of overall socio-economic benefit to Manitobans.<sup>1</sup>

The MMF, on behalf of the Manitoba Metis Community which it represents, approached its intervention as a concerned Aboriginal community as referenced in section 2(h) of the NFAT Terms of Reference. The MMF participated as an intervener in the Clean Environment Commission ("CEC") hearings on the Bipole III and Keeyask projects and has appreciated the opportunity to participate as an intervener in the NFAT in testing the case Manitoba Hydro has presented with respect to its Plan.

The Terms of Reference note Manitoba Hydro's assertions that the Plan will provide "*significant benefits to Manitobans*", that the value proposition of the Plan "*is justified on a very broad basis*" and that it is "*the best development option when compared to alternatives*".<sup>2</sup> Throughout the NFAT, Manitoba Hydro has called evidence to support these assertions. Interveners and Independent Expert Consultants (IECs) have called evidence that has strongly tested these assertions. Based on the record that has been established in the NFAT, the MMF is of the view that these assertions are not founded on the evidence.

The MMF submits that there are a number of other alternatives that could fulfill the needs of Manitobans, provide more socio-economic benefits and reduce impacts to the Manitoba Metis Community and other Aboriginal communities. The MMF is of the view that Manitoba Hydro did not give adequate consideration to these alternatives and given the risks of its Plan, it is not justified as being in the best long-term interests of Manitobans at this time.

Below, we briefly outline the evidence we are relying on in support of our position and provide our concluding comments for the PUB's consideration.

## II. SUBMISSIONS ON SPECIFIC ISSUES

### 1. Outstanding Information

The MMF is concerned that there remains a vast amount of outstanding information that limits the ability of the MMF and in some cases the PUB, to fully analyze the Plan and the alternatives. While the PUB and IECs have had access to much of the data on financial and

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<sup>1</sup> PUB Order 67/13, Page 28.

<sup>2</sup> Terms of Reference, Page 1.

economic risks of the Plan, transmission planning and export contracts, the MMF was not able to access this information as much of it was deemed commercially sensitive information (“CSI”).

A number of times in this proceeding, it has been noted that most of the information available relates to the Keeyask Project and much of the information on the other projects that comprise the Plan, is not available. We outlined a few of our specific concerns in this regard.

### ***Failure to Consider the Potential Impacts to the Manitoba Metis Community and Others***

Manitoba Hydro has confirmed that not all participating party costs which include process, mitigation, transition and implementation costs which appear in MH Exhibit #91, have been included with respect to the Metis<sup>3</sup>. Regardless of whether it is the Plan or an alternative, the MMF is concerned that there is currently, insufficient information available to determine whether or not there will be impacts to the Manitoba Metis Community as a result of the projects that comprise the Plan and that therefore, there are number of impacts and costs that are not being fully considered in this review.

In discussing Manitoba Hydro’s proactive approach to partnership with CEO Scott Thomson on the opening day of the NFAT<sup>4</sup>, the MMF is disappointed that Manitoba Hydro arbitrarily determines on what projects and with what Aboriginal communities it will apply its proactive approach to. Even when there are a number of other Aboriginal communities, including the Manitoba Metis Community in the Local and Regional Study Areas of the Keeyask Project and certainly in the Conawapa and Manitoba Minnesota Transmission Project areas.

With the vast materials available on the KCNs and the support Manitoba Hydro received from its KCN partners in the NFAT, one might wonder if the materials in the NFAT would have looked differently if Hydro had applied its proactive approach to partnership with the Manitoba Metis Community and other Aboriginal communities. If Hydro applied this proactive approach to partnership to its dealings with the Metis in the Manitoba Minnesota Transmission Project for instance – an area which a converter station has been named after revered Metis leader, Louis Riel – perhaps the MMF would have been appearing in a panel with Hydro and providing the PUB with data and analysis when considering the socio-economic impacts and benefits to the Manitoba Metis Community. If Manitoba Hydro does not expand its proactive approach to considering the needs of the Manitoba Metis Community, there are more than likely, to be costs in the future as impacts will not be fully understood, appreciated and accounted for until much later.

Manitoba Hydro provides volumes of materials showing detailed and comprehensive methodologies for routing/siting and explanation after explanation as to how it engages the public as part of its decision making process. Yet, in presentations from community members such as Ms. Lorna Kopelow<sup>5</sup>, it appears that the MMF’s concerns are shared by others who have not experienced the benefits of Manitoba Hydro’s purported “proactive approach” to meeting with potentially affected Aboriginal communities/individuals in order to address impacts of Manitoba Hydro’s projects.

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<sup>3</sup> NFAT Transcript March 26, 2014, Ms. Shawna Pachal, Page 4032-4034.

<sup>4</sup> NFAT Transcript March 3, 2014, Page 266.

<sup>5</sup> NFAT Transcript May 12, 2014, starting at Page 10447.

These comments are not the grumblings of the Manitoba Metis Community as an Aboriginal community that has been left out. Rather, they offer a cautionary message. The MMF would respectfully note that when the PUB hears that Manitoba Hydro's processes are "comprehensive" or that Manitoba Hydro has considered all potential impacts— that the PUB examine the record carefully.

For instance:

**Advisory Group on Employment:** Manitoba Hydro has said that it is committed to examining concerns related to "Aboriginal employment" on the Keeyask Project and it will continue working with "Aboriginal communities" in examining those concerns. In MMF's cross examination of the Societal Issues Panel, Manitoba Hydro confirmed that while the Advisory Group on Employment established under the JKDA will be making recommendations regarding Aboriginal employment on the project there is only KCN representation and no MMF or other Aboriginal representation<sup>6</sup>.

The MMF finds this particularly offensive. Metis form a significant part of Manitoba Hydro's Aboriginal workforce. In PUB/MH II-423c, which asked for a breakdown of Aboriginal employment on the Keeyask Project by community (which includes the KCNs), Metis are the second highest Aboriginal group employed. Metis contribute greatly to the Aboriginal employment numbers yet Metis do not have a voice on an advisory group that will make recommendations and effect change on matters directly affecting them.

**Transmission Issues:** In Manitoba Hydro's Societal Issues Panel, Manitoba Hydro testified that there are no Adverse Effects Agreements for transmission<sup>7</sup> and that Manitoba Hydro deals with impacts related to transmission differently than it does with impacts related to generation. Manitoba Hydro explained that there is a comprehensive siting/routing methodology that has been utilized for the Keeyask Transmission Project and the Manitoba Minnesota Transmission Project which involves extensive public engagement to identify impacts and try to avoid those impacts with potential re-routing to areas that will have less impact<sup>8</sup>. Regarding transmission impacts, Manitoba Hydro indicated that routing/alternative route selection in order to avoid environmentally or culturally sensitive areas and then mitigation and monitoring is done.<sup>9</sup>

In the NFAT, we have learned that Manitoba Hydro has already made initial determinations on the impacts due to transmission in the Manitoba Minnesota Transmission Project<sup>10</sup> despite not having heard from MMF who's traditional territory, regardless of which route is chosen, will be impacted by the project. As a landowner in the project area and speaking to her experience with Manitoba Hydro's 'comprehensive' routing methodology, Ms. Kopelow indicated that she attended an open house and filled out a feedback form.<sup>11</sup> The MMF submits that any determinations on the part of Manitoba Hydro on the impacts related to transmission in the

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<sup>6</sup> NFAT Transcript March 26, 2014, Page 4009 to 4011.

<sup>7</sup> March 25, 2014, Page 3597, Lines 17-24.

<sup>8</sup> March 25, 2014, Page 2584 – 85.

<sup>9</sup> Manitoba Hydro later clarified that offsetting programs applied to generation only and not transmission at March 26, 2014 Page 4036 Lines 1-15.

<sup>10</sup> NFAT Transcript March 24, 2014, Page 3587 Lines 24-25, Page 3588 Lines 1-3.

<sup>11</sup> May 12, 2014, Page 10461, Lines 15-19.

Manitoba Minnesota Transmission Project are premature and should not be given any weight by the PUB.

There are no provisions in the JKDA dealing with impacts associated with the Keeyask Transmission Project<sup>12</sup>. The MMF would ask that the PUB consider MMF's request of Manitoba Hydro to provide the 'compensation' or dollar amounts that have been paid out under provisions of the Wuswatim PDA for impacts associated with transmission in that project, which can be found as part of revised MH Exhibit 154 which is Undertaking #74.

Based on our understanding of this document, over \$200 million dollars was paid out from 2006 to 2011. These are substantial amounts and there should be further consideration as to what that will mean for those communities/individuals who stand to be impacted by the Keeyask Transmission Project and the Manitoba Minnesota Transmission Project. Costs related to transmission impacts for these projects have not been considered in the NFAT analysis and will without a doubt, be added in the coming years.<sup>13</sup>

### ***Outstanding Info in MA-CBA***

Dr. Shaffer explained that assessment in Multiple Account Cost Benefit Analysis ("MA-CBA") does not have to be entirely in dollar terms as opposed to a traditional cost-benefit analysis where you would be concerned that there is some uncertainty about projects that are still to be designed and routed.<sup>14</sup> However, the MMF is of the view that the outstanding information as discussed above, would have been helpful to have had in the MA-CBA and that the analysis to some extent is limited to information that is more KCN-focused, with any input relating to other Aboriginal communities being more speculative. The conclusions on the social account are particular to the KCNs rather than the Manitoba Metis Community or the broader Aboriginal and northern communities. There were opportunities to provide this perspective and specific lines in the MA-CBA that could have benefited from this information if it were available in any meaningful form but it wasn't<sup>15</sup>.

In the social account of the MA-CBA it is assumed that major commitments and plans were made to minimize adverse residual effects with extensive mitigation, monitoring, compensation and partnership arrangements. We would remind that this is only true in so far as the KCNs and the general population are concerned. This assumption cannot be made with respect to the Manitoba Metis Community.<sup>16</sup> We would also note that any mitigation with respect to the KCNs only includes those measures in the AEAs and the JKDA and does not include impacts associated with the Keeyask Transmission Project.<sup>17</sup>

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<sup>12</sup> March 26, 2014, Page 4036.

<sup>13</sup> Ms. Karen Anderson for Fox Lake Cree Nation and Ted Bland for York Factory First Nation have both indicated that transmission impacts would be a relevant consideration for them in moving forward. See NFAT Transcript March 27, 2014, Pages 4249-4251.

<sup>14</sup> March 26, 2014, Page 3998 Lines 6-17.

<sup>15</sup> NFAT Filing, Page 57 of Chapter 13, Lines 12-14. Also, Dr. Shaffer in cross-examination indicated that he relied on information provided on KCNs, Keeyask, see NFAT Transcript Marcy 26, 2014 Page 3994

<sup>16</sup> March 26, 2014, Page 4008, Lines 11-25.

<sup>17</sup> *Supra*, footnote 12.

While Aboriginal consultation pursuant to section 35 of the *Constitution Act* is out of scope in the NFAT Terms of Reference, it is an issue at play in terms of costs and how they factor into the project planning process. Any costs on the part of the Government of Manitoba, in any activities as part of the fulfilment of its duty to consult and accommodate Aboriginal communities in the projects that comprise the Plan, are not included in the government account of the MA-CBA. In the government account, the extent to which, the payments to government by Manitoba Hydro constitute incremental revenues not offset by incremental costs or risks borne by the government, is considered.<sup>18</sup> These costs, would have been considered in this account as part of the incremental costs to be compared with the incremental revenues.

Dr. Shaffer confirmed that costs in the government account will only be factored into the analysis if they are 'significant'.<sup>19</sup> It is alarming to the MMF, that costs related to the Government of Manitoba's duty to consult and accommodate Aboriginal communities like the Manitoba Metis Community and other Aboriginal communities, would not be significant given these are extensive projects and would involve extensive consultation with and perhaps accommodation of Aboriginal communities to be affected. We are confused as to why these costs would not have been reported to Dr. Shaffer, particularly when he indicated he made all inquiries as to information that should have been included in this analysis.<sup>20</sup>

## **2. Macro Environmental Considerations**

We appreciate that the PUB has made the recent reports from the Clean Environment Commission ("CEC") and the Canadian Environmental Assessment Agency (CEAA) on the Keeyask Project exhibits for parties to reference in closing argument. The MMF has not had the time or resources in order to consult its experts and consultants on suggestions as to aspects of these reports for further consideration by the PUB.

While our consultant did not comment in detail on these reports in oral testimony, we respectfully provide the caution that originally appeared in our pre-filed written evidence, that the conclusions and recommendations to government provided to the CEC, though necessary to the NFAT, will apply only to Keeyask, as a single component of the Plan and to those plans that contain Keeyask as a component.<sup>21</sup> We are unable to determine the likelihood of significant adverse environmental effects related to other projects that comprise the Plan as detailed environmental information is not available for those projects. Further, individual projects may not have a significant effect, but the collective impact of all of the components that comprise the Plan, may very well be significant.

Additionally, while a commitment has been made to carry out a Regional Cumulative Effects Assessment<sup>22</sup> as was recommended by the CEC in its report on Bipole III<sup>23</sup> the availability of this information, particularly at the time the PUB must consider Manitoba Hydro's Plan to add two new generation stations in the area, would have been helpful in understanding the residual

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<sup>18</sup> NFAT Filing, Chapter 13, Pages 29-30. Also confirmed in testimony by Dr. Shaffer March 26, 2014.

<sup>19</sup> March 26, 2014, Page 2990.

<sup>20</sup> March 26, 2014, Page 2991.

<sup>21</sup> Rick Hendriks, Evaluating Macro Environmental Impact, Page 17.

<sup>22</sup> March 27, 2014, Ms. Pachal, Page 4254-55.

<sup>23</sup> Rick Hendriks Macro Environmental Report, Page 23.

effects of the existing facilities and using that information to predict the macroenvironmental impact of the Plan.<sup>24</sup>

As was highlighted in some of the Information Requests (“IRs”) submitted by MMF’s consultant on macro environmental matters, Ms. Abbie Stewart, the high-level summary provided by Manitoba Hydro at CAC/MH I-231a provides no analysis of the collective consequences or collective change of the Plan and alternatives as is contemplated in the NFAT definition of macro environmental impact. With the information we have available, the MMF submits that there is no way of determining the potential significance of collective change to the environment. We believe that this is a problem faced in some respects by other parties as is demonstrated in some areas of the MNP analysis, such as determining the equitable distribution within and between generations<sup>25</sup> that could not speak to all aspects of the NFAT definition of macro environmental impact.<sup>26</sup>

### **3. Socio-economic Considerations**

As was highlighted in some of the IRs submitted by MMF’s consultant Ms. Meghan Dalrymple, missing in the NFAT filing, is sufficient and adequate information regarding the assessment and mitigation of potential socio-economic effects as may be distinctly experienced by the Metis in the Local and Regional Study Areas<sup>27</sup>. This would similarly be the case for other potentially affected Aboriginal communities other than the KCNs. Manitoba Hydro’s high level summary provided in CAC/MH I-231a, does not contain any information specific to the Metis.

Despite attempts to obtain further information on the alternatives in MMF/MH II-040a<sup>28</sup>, the MMF remains concerned that there is not enough information available on the alternatives to complete the analysis that is contemplated in the NFAT definition of socio-economic impact. As a result, in general socio-economic terms and specific to the Metis and perhaps other Aboriginal groups, it cannot be said that the Plan is the best development option when compared to alternatives.

The PUB attempted to obtain further information in its request that Manitoba Hydro file an additional chart indicating the socio-economic and macroenvironmental impacts in relation to non-Aboriginal northern communities and Aboriginal communities other than those communities that comprise the KCNs. Manitoba Hydro responded in providing its answer to MMF/MH II-40a.<sup>29</sup>

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<sup>24</sup> *Ibid.*

<sup>25</sup> See Slide 53 of MNP Presentation only refer to Keeyask and Conawapa project. See also NFAT Transcript April 4, 2014, at 5383-85 where it is recognized that alternatives considered to extent that they include Keeyask and Conawapa.

<sup>26</sup> Rick Hendriks Macro Environmental Report, Pages 15 – 17.

<sup>27</sup> For a description of Local and Regional Study Areas, see Typlan Presentation, Slide 23.

<sup>28</sup> Concerns include but are not limited to, lack of information specifically related to the Metis, overly focused on employment while not including enough details on traditional land use, info on business opportunities continue to highlight KCN involvement, see MMF/MH II-40a.

<sup>29</sup> MH Exhibit #159.

#### **4. Demand Side Management (DSM), Fuel Switching and Impacts to Ratepayers<sup>30</sup>**

While the MMF did not call any evidence and rather, tested Manitoba Hydro's evidence in this area, the MMF is of the view that there is a need to diversify Manitoba Hydro's DSM Strategy/Programs and fuel switching initiatives, a need to expand on education campaigns targeted more appropriately to Aboriginal and northern communities and a need to broaden its approach to Aboriginal markets to include the Manitoba Metis Community.

***Diversification of DSM Strategy/Programs & Fuel Switching Initiatives:*** In its Load Forecasting/DSM Panel, Manitoba Hydro explained that in pursuing all cost-effective DSM opportunities in Manitoba Hydro's DSM strategy, there is a balancing of being fiscally responsible and being considerate to ratepayers and all customers.<sup>31</sup> When questioned on why it wasn't considering Biomass as part of an alternative, Manitoba Hydro acknowledged that an "obvious" and the most "simplest way" of utilizing biomass would be to have a woodstove in one's home but that Manitoba Hydro's efforts in biomass included a feasibility study which would look at biomass in a broader sense.<sup>32</sup>

We find it troubling that Manitoba Hydro is able to indicate that it is not satisfied on the base case for fuel switching options like biomass,<sup>33</sup> without considering woodstove use in Aboriginal communities, both north and south, where we believe there are significant opportunities in savings for both these customers and for Manitoba Hydro. By focusing on these opportunities in certain communities, these changes which may seem to occur in the "simplest way" may accomplish results at a broader level.

The MMF is aware, and it has been shown in the NFAT through the direct evidence of the Metis panelists in the Ratepayer Panel<sup>34</sup>, that there is a preference for members of the Manitoba Metis Community to use woodstoves as a heat source in the winter.<sup>35</sup> In looking at the two year billing history for these panelists, the savings in their monthly bills when using woodstoves, is significant. Mr. Richard Genaille testified that when wood is used in the winter, his hydro bills stay the same as in the summer. Further, that if he doesn't use wood, the amounts are quite high particularly in cold winters like the one we just had.<sup>36</sup>

The MMF is of the view that DSM programs should be reflective of the needs of the ratepayers/customers they are intended to benefit. The evidence of the Metis panelists in the Ratepayer Panel suggests that woodstove use as a fuel-switching initiative, is an example of a DSM opportunity that considers the needs of ratepayers/customers that can be balanced with the need for Manitoba Hydro to pursue DSM opportunities that are fiscally responsible.

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<sup>30</sup> Aside from MMF's joint presentation with the CAC of the Ratepayer Panel, we did not call evidence, but rather, tested the evidence on DSM, fuel switching and impacts to ratepayers.

<sup>31</sup> NFAT Transcript March 4, 2014, Page 436, Lines 12-23.

<sup>32</sup> March 6, 2014, Page 1198, Lines 2-25.

<sup>33</sup> March 6, 2014, Page 1203, Lines 10-15.

<sup>34</sup> This appears at NFAT Transcript April 23, 2014, Ms. Gloria Hartley, Page 7682, Line 24 & Mr. Richard Genaille, Page 7705, Lines 21-23, and will be discussed in more detail later in this submission.

<sup>35</sup> The MMF cannot speculate on the amount of wood use throughout the Manitoba Metis Community, but is aware of current programs that the MMF and Manitoba Hydro could utilize in order to start the process of collecting this information.

<sup>36</sup> NFAT Transcript April 23, 2014 Page 7707, Lines 5-14.



Manitoba Hydro has agreed that woodstove use, which replaces reliance on electric heat which then reduces load, achieves the same objective of fuel switching initiatives in the south.<sup>37</sup> Manitoba Hydro has confirmed that woodstove use as a fuel switching initiative, is not an initiative that is being driven by Manitoba Hydro.<sup>38</sup> If there are potential benefits to woodstove use, particularly, in northern and Aboriginal communities, it remains unclear as to why there has not been any promotional or educational campaigns in this regard.

Ratepayers like Mr. Genaille and Ms. Gloria Hartley are already utilizing wood as a fuel source which reduces reliance on electricity during Manitoba Hydro's peak in the winter and saves them money on their hydro bills. Further feasibility studies, education campaigns which inform ratepayers of how it is they are contributing to Manitoba Hydro's objectives when using wood and the development of community-based initiatives with communities like the Manitoba Metis Community, should be encouraged.

***Expansion of Education Campaigns to Target Aboriginal and Northern Communities:***

Manitoba Hydro testified that its campaign and education efforts to promote fuel switching initiatives and DSM programs, are primarily targeted to homeowners and homebuilders in southern Manitoba where gas is available.<sup>39</sup> When asked what has been done to promote and educate northern communities on DSM programs and fuel-switching options, Manitoba Hydro could only refer to its consideration of how it targets various sectors as part of its strategy to generally promote brand awareness of its Power Smart program. More efforts should be made in relation to education campaigns for those in Aboriginal and northern communities on even the "simplest" of ways, such as woodstove use.

We are aware that Manitoba Hydro has attempted to learn more about what it can do in the marketing of its Power Smart program. Manitoba Hydro indicated that focus groups were held in Winnipeg, Brandon and Thompson to test a series of Power Smart messages and key themes to identify which message/theme best connects with customers in order to encourage further participation in Power Smart Initiatives. It should be noted that only one of the 59 participants self-identified as having "Aboriginal ancestry"<sup>40</sup>, only 8 participants were within the income brackets of under \$30,000 to \$60,000 and the remaining 51 participants were within the income brackets of \$60,000 to \$150,000+<sup>41</sup>. If education campaigns and the goals of the Power Smart program are to work, we would suggest that Manitoba Hydro consider the testimony of our ratepayer panelists and attempt to reach those Manitobans that stand to be most significantly impacted by rate increases.

***Broadening the Approach to the Aboriginal Market:*** When asked questions on the information it had in relation to program use by 'Aboriginal communities' Manitoba Hydro answered with information in relation to First Nation communities.<sup>42</sup> We learned that Manitoba

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<sup>37</sup> NFAT Transcript March 6, 2014, Page 1213 Lines 1-25.

<sup>38</sup> March 6, 2014, Page 1214 Lines 3-6.

<sup>39</sup> March 6, 2014, Page 1206, Lines 5-15.

<sup>40</sup> This does not indicate whether the participant was First Nation or Metis.

<sup>41</sup> MH Exhibit #126, Manitoba Hydro Undertaking #21 re: focus group demographics, Pages 1 and 2.

<sup>42</sup> NFAT Transcript March 6, 2014, Ms. Morrison, Page 1209, Lines 2-9.

Hydro offers energy assessments on First Nation owned and operated buildings to explore potential energy efficiency opportunities and incentives to implement those opportunities.<sup>43</sup>

Manitoba Hydro was asked broadly about “Aboriginal communities” to which it responded with information on First Nation communities. This is a response that is all too common with Manitoba Hydro. Manitoba Hydro was not able to speak to efforts with respect to other Aboriginal communities, like the Manitoba Metis Community. Manitoba Hydro should be similarly approaching the MMF about development of a Manitoba Metis Community program, about efforts to target this important market and offer the MMF to have energy assessments completed on Metis owned and operated buildings to explore energy efficiency opportunities and incentives to implement those opportunities.

## **5. Financial and Economic Risk**

### ***The 78-Year Study Period is Too Long***

In its rebuttal of February 28, 2014, Hydro maintains that it chose the 78-year study period because of the long-lived nature of the hydro assets and to best address the matter of uncertainty over that timeframe. Use of this study period is longer than Manitoba Hydro uses for instance, in its 20-year projection for its Financial Forecast and the 35-year period for its Power Resource Plan<sup>44</sup>. MMF is of the view that the 78 year study period was chosen as it favours high-risk, hydro-centric plans that most notably, require large capital investments, take a long time to build and are projected to generate savings only after much of their initial cost is paid through depreciation.<sup>45</sup>

The long study period attempts to sell ratepayers on the idea that they will see lowered rates after 26 years, while masking the need for near-term rate increases. This creates intergenerational inequity and would be more apparent if a shorter study period were used.<sup>46</sup>

### ***Risk Associated with Export Revenue***

For Keeyask and Conawapa to result in the net benefits that Manitoba Hydro claims, ratepayers are dependent on the magnitude of future exports and the future level of export prices. The MMF is of the view that we should be alerted when top experts in the North American energy field use words like “disturbing” to describe volatile trends in opportunity sales volumes and prices. We know that there has been a decline in export prices since 2006/7<sup>47</sup> and we also know that little certainty can be found in export revenue forecasts.

In referring to PUB/MH 1-058b, MMF’s expert consultant, Whitfield Russell Associates (“WRA”), notes that the overall forecast of weighted average export prices has dropped in each successive forecast since 2009.<sup>48</sup> We would echo Mr. Russell’s caution that in 2009, the

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<sup>43</sup> March 6, 2014, Page 1209, Lines 14-24.

<sup>44</sup> Manitoba Hydro Rebuttal Evidence, February 28, 2014, Page 122, Lines 11-17.

<sup>45</sup> NFAT Transcript, Mr. Whitfield Russell, May 13, 2014, Pages 10590-91.

<sup>46</sup> *Ibid.*

<sup>47</sup> Mr. Whitfield Russell, May 13, 2014, Page 10594, Lines 5-13. See also Slide 9 WRA Presentation.

<sup>48</sup> Mr. Whitfield Russell, May 13, 2014, Page 10596 Lines 18-22.

forecasted revenue in MWh in nominal Canadian dollars was \$66.9 and \$55.7 dollars whereas the actual price for 2012/2013 was \$34.57.<sup>49</sup> On the declines in prices, WRA cautioned:

“So when I see these kinds of declines in prices, it’s kind of a red warning light. It’s a –it’s a buy signal. This is a strong sign to anybody who’s developing power that, ‘If I sell, I’m not going. And—and if I depend on sales of my surpluses, I’m looking in – into a diminishing market.”<sup>50</sup>

While our experts did not have access to detailed information in this regard, WRA was nevertheless able to identify a substantial gap between the high initial in-service annual revenue requirement to recover the cost of power for new hydro – Wuskwatim, Keeyask and Conawapa (approx. \$100/MWh or 10 cents per kWh - PUB Order 5/12 at 8, 54) and the lower prices that Manitoba Hydro can expect to sell its firm and surplus hydro power in export markets (unit sales of no more than 6-7 cents/kWh on average firm and opportunity sales combined – PUB Order 5/12 at 55).<sup>51</sup>

The risks reliance on export prices and forecasts taken together with the fact that export revenues may not fully recover the costs of new hydro, inspires little confidence that our reliance in the export market will result in the benefits that Manitoba Hydro claims.

### ***Consideration of Bipole III in NFAT***

Hydro has maintained throughout this proceeding that the “shovels are already in the ground” for Bipole III and has emphasized that it was specifically excluded in the NFAT Terms of Reference<sup>52</sup>. As a result of the PUB’s decision in Order 22/14, MMF was able to speak to Bipole III in relation to sunk cost issues, the general risk of reliance on the HVCD corridor and other matters which excluded the need for or alternatives to and the delay potential for Bipole III.<sup>53</sup> We are thankful to the PUB for allowing us the opportunity to emphasize our client’s concerns in this regard.

### ***Adding Costs of Bipole III to Keeyask Increases Costs***

The incremental costs of Keeyask rise to about 17.3 cents per kWh when the estimated 3 cents per kWh cost of Bipole III is added to the 10 cents per kWh cost of power from Keeyask (PUB Order 5/12). This is of concern because the incremental costs of the 2000 MW Bipole III must be recovered on the incremental energy produced from only 630 MW of Keeyask output.<sup>54</sup>

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<sup>49</sup> Mr. Whitfield Russell, May 13, 2014, Page 10597, Lines 6-13.

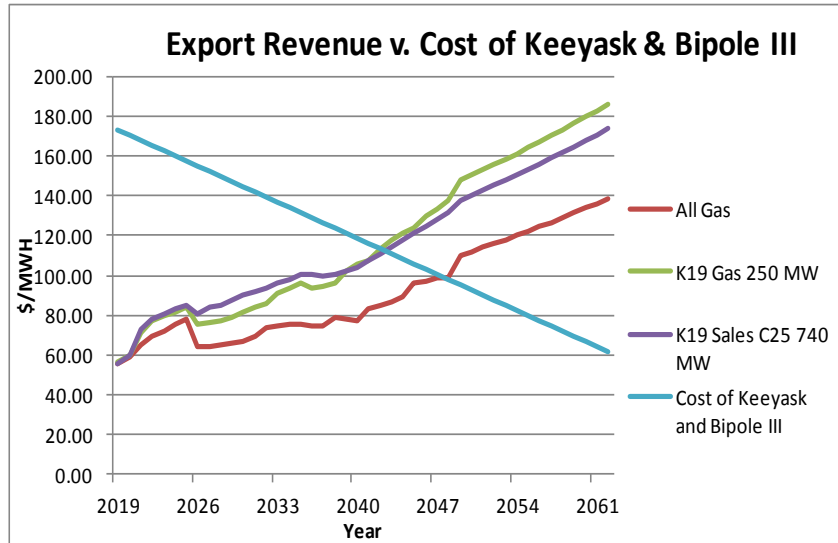
<sup>50</sup> Mr. Whitfield Russell, May 13, 2014, Page 10596 Lines 3-8.

<sup>51</sup> Mr. Whitfield Russell, May 13, 2014, Pages 10599-60.

<sup>52</sup> Ms. Patti Rammage, May 13, 2014, Page 10550, Lines 1-6.

<sup>53</sup> Order 22/14 Pages 10&11 and MMF Application to Review and Vary April 3, 2014, Page 2.

<sup>54</sup> Mr. Whitfield Russell, May 13, 2014, Pages 10607-08.



As is seen in the chart included at slide 21 of WRA’s Presentation, when the costs of Bipole III and Keeyask are plotted on the forecast prices, the costs are not recovered until the mid-2040s.<sup>55</sup>

*Sunk Costs*

As Bipole III will be built to accept the output of Keeyask in 2019 and Conawapa in 2026 and because the “shovels are already in the ground” on Bipole III, future investments in Bipole III have been treated as sunk costs which has had the effect of biasing the analysis in of the Plan.<sup>56</sup>

### Probabilistic Analysis Updated Capital Costs – Keeyask and Conawapa

Development Plan			1	2	4	8	5	14
			All Gas	K22/Gas	K19/Gas24 /250MW	CCGT/C26	K19/Gas25 /750MW	K19/C25 /750MW
			WPS Sale & Investment					
Energy Prices	Discount Rates	Capital Costs	Millions of 2014 NPV Dollars					
Low	Ref	H	-1062	-1401	-851	-1501	-516	-1583
		L	-68	16	646	106	906	632
		Ref	734	1205	1898	1449	2086	2539
		H	-463	-1751	-1512	-2398	-1331	-3755
		L	208	-677	-334	-1085	-172	-1827
		Ref	750	232	658	15	795	-167
	High	H	-88	-1782	-1761	-2625	-1675	-4640
		L	823	-133	110	-519	205	-1356
		Ref	416	-891	-748	-1480	-651	-2876
		H	-2033	-120	543	325	236	2111
		L	-1039	1296	2040	1932	1658	4326
		Ref	-237	2486	3292	3275	2837	6233
Ref	Ref	H	-671	-585	-260	-910	-492	-1130
		L	0	489	917	403	667	798
		Ref	542	1397	1910	1503	1634	2458
		H	17	-716	-620	-1343	-837	-2562
		L	520	175	393	-198	187	-798
		Ref	927	933	1251	762	1043	722
	High	H	-3454	892	1647	2005	645	5631
		L	-2460	2309	3143	3612	2066	7846
		Ref	-1658	3498	4396	4955	3246	9752
		H	-1158	402	797	469	112	1340
		L	-487	1476	1974	1782	1271	3268
		Ref	55	2384	2967	2882	2238	4928
High	Ref	H	-82	210	368	-156	-186	-627
		L	422	1101	1381	989	837	1137
		Ref	828	1859	2239	1949	1694	2657
	High	H						
		L						
		Ref						

<sup>55</sup> May 13, 2014, Page 10608 Lines 11-18.

<sup>56</sup> May 13, 2014, Page 10609, Lines 16-20.

In considering the probabilistic analysis containing the updated capital costs for Keeyask and Conawapa<sup>57</sup>, the \$3.3 billion dollar cost of Bipole III exceeds the incremental benefits which the Plan is said to produce under many scenarios compared to the benefits of the All-Gas Plan. We submit that there would be a considerable change in the probability analysis if the \$3.3 billion cost of Bipole III were added to the NPV of Plan and to those plans that contain hydro<sup>58</sup>.

## **6. Transmission Planning Standards**

WRA provided extensive evidence on transmission planning standards, how Manitoba Hydro's reliability standards have changed and the risks in meeting standards once new generation is added.

WRA has testified that the deterministic standard which requires Manitoba Hydro to be able to meet its peak demand after a loss of Bipoles I and II or a period of months or years, may not have been carried over in developing plans for comparison in the NFAT. Further, that while the deterministic standard could be met by strengthening interconnections to the United States, Manitoba Hydro chose the more expensive option of adding Bipole III.<sup>59</sup>

WRA gave evidence that the 2000MW spare capacity initially created by adding Bipole III according to the standards used by Manitoba Hydro, will drop when Keeyask is added and disappear when Conawapa is added and as part of the Plan, upgrades are being made to import capacity from the US to replace the diminishing spare transmission capacity in Bipole III.<sup>60</sup> The MMF believes that more can be achieved through enhancing interconnections to the U.S than Manitoba Hydro has been willing to consider.

We have suggested that the current situation involves placing "too many eggs in one basket". The same environmental and system related events that Manitoba Hydro believes could take out both Bipoles I and II can take out Bipole III trapping a high concentration of our hydro resources, cutting off revenues from export sales for extended periods of time. As a result, in order to address these issues, we submit that greater emphasis should be placed on the need to improve import capability.

## **7. Alternatives and/or Aspects of Alternatives for Further Consideration**

### ***La Capra's No New Generation "Plan 17"***

Even with \$4.3 billion in sunk costs from Keeyask, Conawapa and Bipole III, despite the fact that the features of those projects add little or nothing to the value, Plan 17 continues to be an economic option.<sup>61</sup> Plan 17 allowed the MMF the opportunity to step outside Manitoba Hydro's hydro-centric box and think about ways to meet our electricity needs in a way that involves less risk and that can be achieved more economically.

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<sup>57</sup> From Slide 25 of WRA Presentation

<sup>58</sup> May 13, 2014, Page 10610 Lines 3-11.

<sup>59</sup> May 13, 2014, Pages 10616-17.

<sup>60</sup> May 13, 2014, Page 10617-18.

<sup>61</sup> May 13, 2014, Page 10614-15. Mr. Russell noted that La Capra qualified that the plan is not quite done such that they suggest implementation of it, rather, it is recommended "to the extent that it raises issues that seem to have promised improved economics".

An additional 500 kv line without any additional hydro capacity not only improves reliability as discussed above, but it also it increases exports and the ability to import power<sup>62</sup>. La Capra and WRA spoke of the opportunities in diversity exchanges. Manitoba Hydro's reluctance to consider these opportunities and rather, attempt to rebut any elaboration on such opportunities is troubling particularly given the potential benefits of this option, as has been detailed in the evidence of La Capra<sup>63</sup> and Whitfield Russell.<sup>64</sup>

Plan 17 indicates that with DSM, diversity exchanges and a second interconnection to the U.S, coupled with greater reliance in firm imports, Manitoba Hydro will be able to push its need for new in-Manitoba generation out until the early to mid-2030s. Based on the evidence of La Capra and Whitfield Russell in this regard, the MMF is of the view that further consideration of this plan is not only merited but would be prudent, given the significant amount of risk facing ratepayers in the current Plan.

### ***The Macro Environmental and Socio Economic Implications of Adding Additional Wind Resources in Manitoba***

The evidence of Rick Hendriks on the macroenvironmental and socio-economic implications of adding additional wind resources in Manitoba raises doubt as to Manitoba Hydro's contention that inclusion of wind would not substantially alter the comparison of the development plans.<sup>65</sup> While Mr. Hendriks qualifies that he did not have sufficient time and resources to undertake a comparative analysis, based on this evidence, the IECs and other interveners and with further study, we believe that Manitoba Hydro would be proven wrong in this regard.

Prior to learning of La Capra's Plan 17, Mr. Hendriks suggested that wind could be part of an optimized delay option. In speaking to this delay option and Plan 17, Mr. Hendriks noted that particularly if there are cost declines, wind could delay the Plan until as far out as 2030 which would avoid a number of biophysical macroenvironmental impacts associated with the Plan. For instance, a Regional Cumulative Effects Assessment and a framework for the Nelson River Watershed could be established.<sup>66</sup>

In reviewing available evidence concerning the macroenvironmental and socio-economic impacts and benefits of additional wind resources in Manitoba, Mr. Hendriks provided the following conclusions on the suitability of additional wind resources as part of an alternative to the Plan or as part of an optimized plan to delay proceeding with the Plan:<sup>67</sup>

- The relatively modest differences between the costs of wind resources and the costs of hydroelectric resources, the likely decline in the cost of wind resources and the imposition of the macro environmental impacts associated with the Plan suggests that

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<sup>62</sup> Mr. Whitfield Russell, May 13, 2014, Page 10620.

<sup>63</sup> The benefit is shown in LCA Appendix. 9B at 29, where LCA states: "The second comparison shows favorable economics for the addition of the 250 MW transmission line and the Minnesota Power contract." See also Figure 9-100 at 9B-32, which shows the benefits arising from the 250 MW interconnection (while moving from 250 to 750 MW shows a drop, the net benefit of adding 750 MW first would also be positive).

<sup>64</sup> WRA Report Pages 34-39.

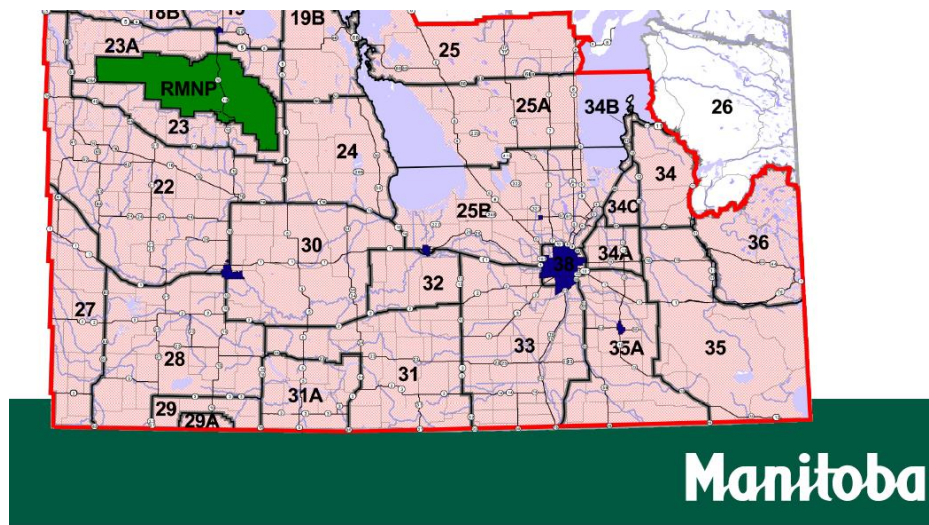
<sup>65</sup> NFAT Filing, Chapter 14, Page 36.

<sup>66</sup> Rick Hendriks, May12, 2014, Page 10363-64.

<sup>67</sup> Rick Hendriks Socio Economic Report Pages 33 and 49.

there is merit in analyzing the most appropriate strategy for delaying a decision on the PDP to beyond 2030.

- The fact that so many wind projects have been approved in Canada, including the development of many projects in the Gaspesie region of Quebec, without concerns respecting significant residual adverse environmental effects, contrasts with the findings of environmental assessment reviews of large-scale hydroelectric projects in the same jurisdictions.
- Development of additional wind resources should be preceded by development of a cumulative effects management framework aimed at identifying those locations most economically, ecologically and socially suitable for future wind energy development. This would have the effect of minimizing the potential for macroenvironmental and socio-economic impacts related to more intensive wind development as part of any future alternative to the Plan.
- The view of Manitoba Hydro that Aboriginal interest in developing wind resources is “neutral” is not supported by experience in other jurisdictions like B.C and Ontario, where wind is being developed and Aboriginal communities are actively involved in such development.
- The development of wind in other jurisdictions supports the view of wind resources as a flexible system planning option that can be developed on short time frames, in sequence that avoids costly surpluses and in a manner that would support the maximization of socio-economic benefits for Aboriginal communities and all Manitobans.
- Growing public knowledge and the examples of communities participating as owners in development of wind and other small-scale renewables suggests that a different approach to the one currently utilized by MH with respect to these resources will be needed if we are to aim in achieving the highest levels of socioeconomic benefits for Aboriginal communities and all Manitobans.



In considering the potential socio-economic benefits to the Manitoba Metis Community as an Aboriginal community developing wind resources in Manitoba, Mr. Hendriks' provided the above map showing the currently recognized Metis Harvesting Zones<sup>68</sup>. He testified that it is in the southern and southwestern regions of Manitoba as pictured in this map, where wind development is most likely to occur and that Manitoba's current wind farms at St. Joseph and St. Leon are in close proximity to communities that comprise part of the Manitoba Metis Community.<sup>69</sup>

### III. CONCLUSION

Based on the evidence we have called and heard in this proceeding, we have the following conclusions to offer for the PUB's further consideration.

#### ***Reflecting on Manitoba Hydro's Decisions on Bipole III***

As a result of this NFAT, the PUB should recommend legislation requiring that Manitoba Hydro be required to undergo an NFAT before undertaking any major capital expenditure as a pre-condition to recovering its costs in rates. We are aware that with respect to Bipole III, other measures have been put in place to assist ratepayers and we appreciate efforts made in that regard.<sup>70</sup> However, we do not agree with the position that ratepayers have been placed in, as a result of Manitoba Hydro's decisions on Bipole III. Were it not for the PUB allowing the MMF to call the evidence of Whitfield Russell Associates, we would not have known the effect Bipole III's treatment in the NFAT has had on the economics of the Plan and the consideration of alternatives. We would provide the reasoning in the PUB's 2012 Order which addressed the flaws in Manitoba Hydro's use of levelized costs to further demonstrate our concerns<sup>71</sup>:

MH does not agree with the use of the initial in-service annual revenue requirement to define current rate impacts and suggests that longer term (50-100 year) levelized (sic) costs should be employed in determining the impact on domestic rates. This approach, if adopted by MH and PUB, has two implications:

- It would assign all new project costs to domestic customers; and
- It would result in the new export sale contracts enjoying the longer-term average prices despite the fact that the actual contract terms currently only extend to 10-15 years.

In short, it appears that MH prefers to consider revenue flows from export contracts linked to the construction and operation of new hydro-electric generating stations to be considered "incremental" revenue that is not subject to the full costing that usually applies to the consideration of new plants.

The Board is of the view that before proceeding with the construction of any of the new hydro-electric plants, and following an NFAAT, the Board should determine the potential rate impacts for domestic Manitoba customers with respect to these projects.

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<sup>68</sup> Slide 41, Rick Hendriks Presentation which indicates the currently recognized areas which members of the Manitoba Metis Community harvest pursuant to their section 35 Aboriginal rights, according to certain specifications (Metis Laws of the Harvest) – explained by counsel, see NFAT Transcript, May 12, 2013, Page 10372-73. Note: emphasis in underline added as these areas are still being negotiated.

<sup>69</sup> Mr. Rick Hendriks, May 12, 2014, Page 10371

<sup>70</sup> NFAT Transcript March 11, 2014, Pages 1697-98.

<sup>71</sup> PUB Order 5/12, Pages 55-56.



Otherwise, there is a genuine risk that domestic rates will rise sharply as the new generation and transmission assets currently planned come into service.

Bipole III was not reviewed in the NFAT, its costs were included in all alternatives with the result that its effect on the evaluation of alternative plans has been neutralized. As predicted by the PUB, Manitoba Hydro predicts even-annual average rate increases of approximately 3-4% for the next 17 years, or 1.44% - 2.07% even-annual average rate increases for the next 50 years, depending upon the alternative chosen.<sup>72</sup>

Based on what we have seen in the evidence of Whitfield Russell in the NFAT, we appreciated the PUB's decision to hear our concerns on among other things, the effect Manitoba Hydro's decisions on Bipole III has had in the analysis in the NFAT. While relatively new to the discussions that occur at the PUB regarding these matters, the MMF's inclination to explore these matters arose in considering the likely reaction that many ratepayers will have once we, as Manitobans, start to experience the impacts of decisions made by Manitoba Hydro and the Government of Manitoba on the many projects that comprise the Plan.

### ***La Capra Plan 17, an Additional 500 kv Interconnection, Wind and Fuel Switching***

Manitoba Hydro should pursue Level 2 DSM and other energy efficiency measures in order to put in place effective load reduction.<sup>73</sup> As part of Manitoba Hydro's DSM program, it should consider education campaigns and investment in even the "simplest" measures such as wood as a fuel-switching initiative, that have the potential to result in significant cost savings for ratepayers, particularly those in the Manitoba Metis Community, who rely on wood as a heat source in the winter.

As evidenced by Plan 17, Manitoba Hydro should actively seek to extend and seek out new opportunities for Diversity Exchanges.<sup>74</sup>

A second 500 kV interconnection to the United States should be pursued, whether it be the proposed Manitoba-Minnesota Transmission Project or an alternative 500 kV line to the Fargo, North Dakota area.

If DSM, diversity exchanges, the construction of Bipole III,<sup>75</sup> and a second U.S. 500 kV interconnection were to be put into place, Manitoba Hydro would be in a position to review its timeline for new generating resources needed. The need for new in-Manitoba generation could be pushed out to as far as the early to mid-2030s. If capacity is not required to meet demand until this time, we would suggest that there would be opportunities for less macro environmental impacts and additional socio-economic benefits if a Wind/Keeyask in 2026 plan were to be considered.<sup>76</sup>

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<sup>72</sup> Table 11.1 in PUB/MH I-149a

<sup>73</sup> Exh. MH-95, LCA App 3B at 20f and App 9B at 20f

<sup>74</sup> See the results assuming that DSM and Diversity Exchanges added to Plan 14, as provided in MH Exhibit# 104-14 as provided in MH Exhibit# 200.

<sup>75</sup> Despite our positions on Bipole III, we are told the "shovels are already in the ground".

<sup>76</sup> See comments Rick Hendriks Socio-Economic Report, Page 14, and conclusions on wind as set out in section 7 of these submissions.

### ***Further Consideration by Manitoba Hydro on the Need for its Plan***

Careful consideration should be given to deciding between the next generation additions, focusing primarily on adding wind generation as has been suggested in Rick Hendriks' evidence, as well as gas alternatives and Keeyask.

Keeyask should only be pursued if its relative economics improve. We suggest this could occur if for instance, present low discount rates remain unchanged, higher export prices, capital costs are contained and independent entities offer to buy into Manitoba Hydro's share of the Great Northern Transmission Line.

Deferring Keeyask by any amount of time will save ratepayers money<sup>77</sup>. Deferring expenditures today saves money, as money spent later is then adjusted by the NPV of those future dollars, making the future expenditure less costly today. La Capra has also noted that the concept of delay has some potential value.<sup>78</sup>

### ***Further Consideration by Manitoba Hydro of the Reliability Criteria***

We suggest that Manitoba Hydro begin a careful transmission study and cost/benefit analysis to determine the benefits of changing its planning criteria to increase its reliance on imports. With completion of a second interconnection to the U.S., the reliability of imports will be increased, and Manitoba Hydro's ability to depend on its interconnections will also be increased.<sup>79</sup>

### ***Further Consideration by Manitoba Hydro of the Impacts to the Manitoba Metis Community***

Having heard the views of the MMF on the need for Manitoba Hydro to apply its proactive approach to partnership and stakeholder engagement with respect to the Manitoba Metis Community, the MMF submits that it is not too late for Manitoba Hydro and the MMF to work collaboratively and in a more meaningful way, towards partnership opportunities as well as identifying, mitigating and monitoring the impacts to the Manitoba Metis Community in the projects that comprise the Plan, if it is to proceed.

If there are delays in implementation of its Plan or if consideration is given to other alternatives like wind and biomass, the MMF submits that there are significant opportunities to reduce macro environmental and socio-economic impacts while increasing the socio-economic benefits of its projects if this proactive approach is applied in Manitoba Hydro's dealings with the Manitoba Metis Community.

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<sup>77</sup> Exhibit. LCA-45 at 37 and 67 notes same benefits achieved with deferral of Keeyask

<sup>78</sup> LCA Exh. 9B at 29.

<sup>79</sup> WRA Report 36-38 for benefits of reliability of second interconnection, and LCA Tech. App. 8-4 and LCA Tech. App. 3B-26.