

# **To the Manitoba Clean Environment Commission**

## **IN THE MATTER OF:**

**The Wuskwatim Generating Station Project and Transmission Project**

**Public Registry File Nos. 4724 and 4725**

**Hereinafter referred to as “the Wuskwatim Project”**

## **APPLICANT:**

**Pimicikamak**

## **NOTICE OF MOTION**

THE APPLICANT, Pimicikamak, brings this motion to be heard by and before the Manitoba Clean Environment Commission as soon after August 15, 2003 as this motion can be heard. The Applicant expects to file with the Commission by August 11, 2003 a motion record containing a statement of facts and law, and several affidavits to support this Notice of Motion. The Applicant asks that the motion be heard orally.

## **THE MOTION IS FOR:**

1. A decision by the Commission to broaden the scope of its review so as to consider the development that is actually underway, and proposed: “the Whole Project”, which includes existing Churchill River Diversion and Lake Winnipeg Regulation and Nelson River works and operations (“the Existing Segment”), and presently contemplated future works and operations including the Wuskwatim Project (all of which are “the Future Segment”).

2. A decision by the Commission finding that Manitoba Hydro's assessment filings (the submission on the Need For and Alternatives To the Wuskwatim Project, and the Environmental Impact Statement) are seriously deficient, which disables the Commission from carrying out any review. The filings do not consider and assess what the proponent is actually doing and actually intends to do. Filings misconceive and misrepresent or completely omit fundamental concepts and issues.

## **THE GROUNDS FOR THE MOTION ARE:**

### **A. DECISION ONE: REVIEW THE WHOLE PROJECT**

#### **Summary**

1. The Applicant submits that the Commission has:
  - a. the authority to broaden the scope of the review to consider the Whole Project;
  - b. the need to broaden the scope to consider the Whole Project in order to carry out the job it has already been tasked to do (advise on whether to approve a particular addition to the Existing Segment, and if so, under what conditions); and
  - c. the duty to broaden the scope to include the Existing Segment, to allow for a remedy of (and to not condone) the ongoing illegal operation of the Existing Segment, which was constructed and has

been operating in violation of Manitoba law, without legally required approval pursuant to The Environment Act.

2. There is and has for three decades been a Whole Project. It has been defined as such, and is intended to operate as such. The Whole Project is underway. Much of it has been built (Existing Segment); the rest is intended to be built as soon as Manitoba Hydro can find a market for the energy. At any given date, details about aspects of the Future Segment may be uncertain, but this does not somehow render the Future Segment as not part of the Whole Project.
3. Much that is important and known about the Whole Project has been omitted or sanitized from the record before the Commission. For example, the Whole Project is intended to obliterate the shoreline ecosystems of the major lake and river systems of the Northern Manitoba boreal forest, step by step. Much of this has already happened.
4. The Existing Segment is fundamental to this review, and is missing. In 2001 a formal public Interchurch Inquiry into Northern Hydro Development that considered extensive evidence provided by Manitoba Hydro concluded that in northern Manitoba, the Existing Segment “constitutes an ongoing ecological, social and moral catastrophe.” In 1997, the effects of the Existing Segment led the Applicant to declare a state of emergency, apprehending its continued survival as an indigenous people to be threatened. These issues are not even considered in Manitoba Hydro’s EIS.
5. Manitoba Hydro treats the Wuskwatim Project as distinct and separate from and not integrated into the Whole Project. This treatment, if not corrected, would prevent the Commission from doing its job.

6. The Commission cannot do its job in this case unless it reviews the Whole Project.
- It cannot know what it is being asked to change unless the Existing Segment and its effects are fully reviewed.
  - It cannot know how and how much the Existing Segment might and should change unless the whole Future segment is reviewed.
  - It cannot know whether to approve any part of the Future Segment, and if so under what conditions, without reviewing the whole Future Segment. Each part will affect other parts and the whole. More particularly, and contrary to the assertion in Manitoba Hydro's EIS, it is clear that the operation of Lake Winnipeg Regulation will be affected by the Wuskwatim Project (and in general by the Future Segment).

### **Authority to Broaden Scope**

7. The Commission has the authority to broaden the scope of the review, pursuant to Section 6(3) of The Environment Act, C.C.S.M. c. E125, which states:

“The commission may on its own volition conduct an investigation into any environmental matter, except a matter involving the gathering of evidence to determine whether or not a specific proponent is complying with the provisions of this Act and the regulations, and advise and make recommendations thereon to the minister.”

8. The Commission's job starts with determining what it is it needs to know (and what the public needs to know) to enable it to its job. It determines the disclosure and assessments it requires. It is not what the EIS Guidelines require; it is what the job requires. In fact, the job should always determine the Guidelines; never the other way around. There is nothing that holds the Commission to the Guidelines as a full, or maximum, standard of disclosure. The Commission has full authority (and the duty) to look at what its job requires, and set the standards of disclosure and assessment by that.
9. The Commission could theoretically use cumulative effects analysis as a device to get at the Whole Project indirectly (see for example section 7 of the Guidelines). But for the reasons set out below, this is not likely to result in the necessary disclosure and assessment. Instead, a much more direct approach is preferred.
10. Cumulative effects analysis itself requires assessment of information about the Whole Project. Although this type of analysis should be done (and has not been done, due to seriously deficient filings), the Applicant submits that it is not appropriate or adequate to capture what the proponent is actually doing and intends to do. There are two reasons for this:
  - a. First, cumulative effects analysis is meant to apply to the case where the project being reviewed is an independent development that can be considered as separate and distinct from, and not integrally dependent on and interwoven with, other developments. It is meant to consider how the impacts from otherwise independent projects or developments may interact and thus be cumulative. That is not the case here. The Whole Project is a deliberately

interwoven entity: no part can be considered as a disparate and independent development. It is not just that the effects overlap in this case; the whole project is by design and operation a single industrial enterprise.

- b. Second, even in cases where the project being reviewed is an independent development, cumulative effects analyses have often treated these effects as peripheral to the development under review. Neither the Existing Segment nor the Future Segment nor their effects should be considered peripheral here.
11. The Commission should, and has the authority to, broaden the review to consider the Whole Project through more direct means. It should ask Manitoba Hydro for all the information it requires to do its job, including information about existing and anticipated impacts of the Whole Project. It should expect disclosure and assessment of what the proponent can obtain and provide through reasonable diligence (it is not suggested that the same level of detail would be provided for other parts of the Future Segment as for Wuskwatim).
  12. There is precedent in other jurisdictions for review of an existing project after the fact, and a review of a major project such as the Whole Project (and in fact much larger than this) can be undertaken. This has happened with hydro projects in the U.S. pursuant to the 50-year licence review requirement under the Federal Energy Regulatory Commission and other environmental review processes.

### **Need to Broaden Scope For the Commission To Do Its Job**

13. The Commission has the need and responsibility to consider the Whole Project. It is the appropriate and perhaps the only way the

Commission can do its job in this case and act in the public interest. This job is to consider what is likely to happen (effects) as a result of a proposed development, and recommend how best to manage that (including whether to license it or not, and if so, under what conditions).

14. If the Commission does not do this now, and if similar decisions are made in future, the Whole Project may proceed incrementally without it ever being subjected to assessment and public review.
15. There is a Whole Project, and this has been clear since at least the mid-1970's. It has been defined, and is well enough defined to engage in review of it as a whole. In 1975, a joint federal-provincial Study Board reported on the Lake Winnipeg, Churchill and Nelson Rivers Hydro-Electric Development. It defined the Whole Project as herein, and included the Wuskwatim Project in the Whole Project. In 1977, Manitoba Hydro and the two governments entered into a modern treaty (often called the Northern Flood Agreement or NFA) in respect of the effects of the Whole Project. The NFA adopted the Study Board definition. Further, much of the Whole Project has been constructed and operated and so is very well defined.
16. Section 1(1) of the Environment Act states:

“The intent of this Act is to develop and maintain an environmental management system in Manitoba which will ensure that the environment is maintained in such a manner as to sustain a high quality of life ... and in this regard, this Act

...

(b) provides for the environmental assessment of projects which are likely to have significant effects on the environment;

(c) provides for the recognition and utilization of existing effective review processes that adequately address environmental issues; ...

17. If these serious aspirations are to be more than mere words on paper, the Commission must consider the Whole Project: what is actually underway and in contemplation.
18. The Commission cannot do its job without knowing and understanding three things:
  - Where we are starting from, the part of the Whole Project that has already been built and how it is operating (the Existing Segment and its effects).
  - How and how much this might change through development of the Future Segment.
  - The principles for environmentally managing all of this (the “environmental management system in Manitoba which will ensure that the environment is maintained in such a manner as to sustain a high quality of life” pursuant to section 1(1) of the Environment Act).

All of this should lead to the best possible management recommendations, including which conditions should be put on the Existing Segment, whether any part of the Future Segment should be approved (and in which order, at which time, etc.), and if so, under what conditions.

19. **Where we are starting from** must first be understood. In this case it is the Existing Segment and all its effects. The Existing Segment has never been assessed and has never been reviewed. The Commission does not know what its effects are. There is no way to know and



understand the environmental, social, economic and other effects of an alteration to something, unless one knows and understands what that something is and what its effects are. Wuskwatim cannot and will not exist in a vacuum.

20. The only appropriate way to address this is to broaden the scope of assessment and review to include the Existing Segment.
  
21. **How and how much the Whole Project could change** through the Future Segment as presently contemplated, must be understood next. The changes that are intended are not just the addition of the Wuskwatim Project. That is only one step in an intended continuing development of the major northern river systems of the boreal region in Manitoba. Manitoba Hydro has publicly represented that its intent is to develop the remaining “hydro capacity” in the province through a series of dams, and some significant portion of this is the Future Segment of the Whole Project.

Manitoba Hydro states that the province’s boreal rivers are “only half exploited”. (The Hydro Province (leaflet), Manitoba Hydro Public Affairs, September 2000).

The Premier of Manitoba speculates openly of \$8 billion (\$U.S. 5 billion) worth of hydro expansion. (Winnipeg Free Press, August 1, 2002, “Discord over Kyoto accord”, and May 18, 2002 “Kyoto gold to Manitoba”).

Manitoba Hydro states that it has “identified sixteen sites in Manitoba for potential development of future hydroelectric generating stations. These sixteen options were considered to be

candidates for connection to the central electricity transmission system” (NFAAT overview, p. 1).

22. Utilities develop experience and biases which guide and in fact often predetermine actions and decisions. Manitoba Hydro’s existing experience and bias is in favour of hydro development. It is this predeliction or bias, and the intent to act upon it by developing the Future Segment and using the rest of northern Manitoba’s waterways to generate hydroelectricity, which should be front and centre in considering how and how much the Whole Project could (and should) change. If it is not, the hydro bias will likely predetermine future decisions, and intentions will more likely materialize into actions whether they should or not.
23. As long as Manitoba Hydro is focusing knowledge, expertise and resources on completing a massive hydro megaproject, and there is no review and oversight to check this, it is practically inevitable that the organization will have fewer resources and less willingness and orientation to pursue alternatives.
24. The Commission needs to review the Future Segment to understand how each time we choose hydro, we likely reduce the viability of alternatives such as wind and DSM, and thus set hydro development intentions more in concrete. This can keep us on the hydro development path well past the point when we should be choosing alternatives. There are three reasons for this.
  - a. Export prices for electricity drop as the amount of surplus electricity supply increases, so the value of energy from wind and DSM would be reduced with Wuskwatim and other hydro dams in place.

- b. Building Wuskwatim and other dams will increase financial pressures upon Manitoba Hydro during construction and (depending upon export prices and other factors) for some period thereafter. The financial impacts of Wuskwatim alone could discourage Manitoba Hydro from pursuing DSM. It could also discourage wind power, which like hydro involves paying more upfront in early years of development.
  - c. Manitoba Hydro could use its hydro system for shaping and backup of the intermittent wind resource, so that wind could be marketed as a higher value firm on-peak product. However, there could be less capability to provide these services for wind if the hydro system is already being used to shift Wuskwatim output from off-peak to peak, rendering wind a less viable option once Wuskwatim is in place.
25. If all of the facts about the Future Segment and the bias already in place toward hydro are revealed and examined now, then the Commission and the public will have the opportunity to see how decisions today may affect the viability (and the perception of viability) of various choices tomorrow, and how we can mitigate or offset negative consequences of any such decisions.
26. A second kind of bias results from the presentation of the Wuskwatim Project as a separate and disparate thing to be considered in isolation from the Existing Segment and the rest of the Future Segment. This presentation intrinsically suggests Wuskwatim is “small”, and that it will not really have any significant negative consequences about which we should worry. This type of presentation and suggestion is likely to occur in regard to the rest of the Future Segment, unless it is checked now with review of the Whole Project.

27. There is nothing “special” about Wuskwatim that means it can and should be considered as a disparate unit. The only reason that Wuskwatim (as compared to other future dams) was chosen now, is simply the result of an economic forecast analysis. Manitoba Hydro’s analysis of export markets over the next 15 years led to the conclusion that for now, Wuskwatim is more economically justifiable than other components. When export market conditions become more suitable for other dams, Manitoba Hydro intends to seek environmental licences for them, presumably also as separate entities.
28. **How the Whole Project should be environmentally managed** should be determined (and can be recommended by the Commission) out of the review as above.
29. The Commission’s responsibilities within Manitoba’s environmental management system will not be served by an approach, crafted by the proponent, that cuts up the whole and leaves major dimensions of the Whole Project to fall through artificial cracks such that they are never reviewed. The Whole Project is huge. It is modifying (and perhaps putting at risk) the heart of the North American boreal ecosystem.
30. The decision to consider the Whole Project is therefore a fundamental and necessary precedent. It is now or never.

### **Opportunity to Regularize Existing Illegal Operations**

31. The CRD component of the Existing Segment has been operating illegally since it was constructed in the 1970s. Diversion of Churchill River water (by definition, a “contaminant”) into the Rat, Burntwood and Nelson Rivers required approval from the Commission under The

Clean Environment Act as it existed at that time, but approval was neither sought nor obtained. The same is true of other elements of the Existing Segment.

32. If approvals had been obtained, they would be deemed an environmental licence for the Existing Segment under today's Environment Act. The present (Wuskwatim) assessment and review process would have been initiated under section 14(1)(b) of the Act in regard to a proposed alteration to a licenced development; section 14(3) would have referred the proposal to section 12 (process for dealing with proposed Class 3 Developments). The Commission and the public review would today be assessing and reviewing an alteration (albeit a major one) to an existing licensed development.
33. Hydro development in Manitoba has always required two main types of licences. One is a Water Power licence (under the Water Power Act) which sets conditions on, among other things, the use (including storage, diversion, and flow) of water for power (including the generation of electricity). The other is an environmental licence, which sets conditions on the nature and extent of effects on the environment from this use of water, including prevention, mitigation and remediation conditions. In Manitoba, it was and is illegal to construct and operate a hydro development without both licences, unless there was or is a legal exemption from this requirement. As set out below, there was and is no such exemption in this case.
34. The 1972 Clean Environment Act was the statute in force when Manitoba Hydro started much of the Existing Segment (following receipt of Water Power licences, first for the Lake Winnipeg Regulation, and later the Churchill River Diversion). This Act stated:

“No person shall unless exempted by the regulations construct premises or alter same or set into operation any industry, undertaking, plant, or process that will or may result in the discharge or emission of any contaminant into the environment unless he submits his proposal to the commission and obtains approval thereof from the commission.” (s. 14(1))

“Where, at the time of the receipt of the proposal under subsection (1), limits have not been prescribed by the regulations, the commission shall require the person to submit an application to prescribe limits and the person shall comply with the limits prescribed by the commission.” (s. 14(3))

“The commission may, unless otherwise directed by the minister for the purposes of carrying out its duties and functions under the Act, investigate any matter respecting the environment and for that purpose hold such hearings as it deems advisable.” (s. 13(1))

“No person, either directly or indirectly, shall cause, suffer or permit the contamination of water in excess of prescribed limits.” (s. 5)

“Any person who contravenes or violates any provision of this Act or the regulations or fails to comply with any order of the commission made pursuant to this Act or the regulations, is guilty of an offence ...” (s. 7)

“‘Contaminant’ means any solid, liquid, gas, waste, odour, heat, sound, vibration, radiation, or a combination of any of them that  
(i) is foreign to or in excess of the natural constituents of the environment; or

- (ii) affects the natural, physical, chemical, or biological quality of the environment; or
  - (iii) is or is likely to be injurious to the health or safety of a person; or
  - (iv) is or is likely to be injurious or damaging to property; or
  - (v) is or is likely to be injurious or damaging to plant or animal life; or ...
- (s. 1(d)).

“The Crown or any agency of the Crown s bound by this Act.”

(s. 21)

35. Manitoba Hydro breached the 1972 Act:

- a. It never applied for approval to construct and operate the Existing Segment.
- b. It never applied for prescribed limits on environmental effects or contamination from the Existing Segment.
- c. It never received an exemption from the requirements to apply for approval and to apply for any limits or conditions on this approval.
- d. It never got approval to construct and operate the Existing Segment, and to contaminate and affect the environment as a result.
- e. It never got any approved prescribed limits on the Existing Segment and on any contamination or environment effect therefrom.

- f. It never received an exemption from the requirement to obtain such approvals.
  - g. It has caused the contamination of water without any approval to do so. The diverted Churchill River water alone is a contaminant of the environment as defined. There were and are many other types of contaminant, including vast quantities of eroding sediment, peat moss, other organic materials, and wood debris.
  - h. On the bases set out above, Manitoba Hydro constructed and has been operating the Existing Segment in contravention and violation of the 1972 Act and amendments thereto.
36. There was never any investigation, review or assessment of the Existing Segment and its potential or actual contaminations and environmental effects. The Manitoba Minister of Mines, Resources and Environmental Management in 1973 told the Clean Environment Commission of the day to not investigate:
- “The Chairman [of the Commission] advised that a memorandum dated 15 January 1973 had been received from the Honourable Sidney Green indicating that the Minister does not wish the Commission to carry out any investigation under Section 13(1) as it would relate to the Churchill River Diversion and other aspects of the announced government program for the development of the Nelson River. The directive was acknowledged.”
- Commission Minute Books, 22-23 January 1973, p. 1123-4.
37. It may be that this directive was improper and played a part in the scandal and serious problems identified in the Report of the Tritschler



Inquiry of December 1979. Of course, less was then known about how serious and long-lasting environmental effects can be and the importance of environmental assessment and review for sound decision-making.

38. This directive does not preclude the Commission from exercising its authority under s. 6(3) of the Environment Act today. Nor did this directive in any way exempt Manitoba Hydro then from meeting the requirements of the 1972 Act, including to apply for and receive approval and conditions/limits on the Existing Segment and environmental effects or contamination therefrom.
39. The ongoing breach of Manitoba law is serious, substantive, and should be remedied now. Fortunately, it can be remedied now, and the remedy (licencing under the Environment Act) should necessarily be based on the information gained through an assessment and review of the Whole Project. This information is necessary in order to determine what conditions should be on the licence.
40. Technically, the Manitoba Government could grant an exemption to Manitoba Hydro from the environmental licence requirement for the Existing Segment (or CRD) now. An exemption issued this way would however amount to a grant to the proponent of a right to operate the Existing Segment in whatever manner it wants regardless of the environmental consequences. This is the practical effect of the present illegal operation.
41. The Commission has the authority, pursuant to section 6(3) of the Environment Act, to investigate the Whole Project. Note that the Applicant is not asking the Commission to be involved in “gathering of evidence to determine whether or not a specific proponent is

complying with the provisions of this Act and the regulations” under section 6(3). Regardless of any violation and illegal operation, and quite apart from it, the Commission has authority to investigate the Whole Project. It has the responsibility to do so, for reasons stated above, because the broader scope assessment and review that includes the Existing Segment is fundamentally necessary to the Commission to enable it to carry out the job that is now before it.

## **B. DECISION TWO: REQUIRING AN ADEQUATE ASSESSMENT FROM MANITOBA HYDRO**

### **Summary**

42. The deficiencies below establish that the Commission cannot do its job using these filings. The deficiencies presented are in no way meant to be considered as some exhaustive list. They include deficiencies in the amount and type of information provided, which in large part stem from the illusion created by the proponent of Wuskwatim as a separate and independent project (illustrating the need to put the proper scope of review squarely before the proponent). They also include fundamental misconceptions of the very bases of assessment and review.
43. There are two major categories of deficiencies in Manitoba Hydro’s filings.
  - a. Those that go to the scope of the review. Not enough information is presented. Information on cumulative and system-wide impacts is seriously deficient, even in regard to reviewing just Wuskwatim, and this is likely due in part to the portrayal of Wuskwatim as disaggregated from the whole.

- b. Those that go to the types of things to be reviewed and how they are conceived: the need for the project, the alternatives to the project, the justification for the project, and the likely environmental effects of the project. These types of deficiencies would exist even if it were legitimate to review the Wuskwatim Project in isolation.

44. This is a precedent-setting and important review.

- a. This will be the first ever assessment and review of any aspect of the hydro project. How we proceed with it will have a profound effect on policy and practices for years to come.
- b. Much is at stake, both future and past.

Manitoba Hydro has been marketing its product as clean, green, renewable, aboriginal-approved and (most recently) as an answer to climate change. The Province has been lobbying Ottawa for funds, including from the Kyoto implementation budget, for an east-west transmission line to facilitate new hydro development. Wuskwatim is but one of several planned dams/generating stations.

The Existing Segment has never been reviewed, and clearly should be now.

45. We are entering a new era in decision-making about development. In the past, when resources seemed unlimited, we tended to build first and ask questions later. Rivers were viewed as having no use unless they could be harnessed. Forests were viewed as having no value unless we cut them down. We are beginning to understand that these views cannot continue to dominate decision-making about

development, and that a viable environment is a primary need against which other needs must be measured.

46. The importance and precedent-setting nature of this review demands thorough, comprehensive and fact-based filings from Manitoba Hydro. This is true even if it were legitimate to review only the Wuskwatim Project in isolation.

Even the Wuskwatim Project alone is a class 3 development under the Environment Act, which means “the effects of which are of such a magnitude or which generate such a number of environmental issues that it is as an exceptional project” (s. 1(2)).

47. Under The Environment Act, environmental decision-making depends on accurate self-assessment. The proponent must provide information sufficient for the Commission, with the help of intervenors, to do its job.
48. As stated in section A above, the Commission’s job starts with determining what it is it needs to know (and what the public needs to know) to enable it to its job. It is not what the EIS Guidelines require; it is what the job requires. There is nothing that holds the Commission to the Guidelines as a full, or maximum, standard of disclosure. The Commission has full authority (and the duty) to look at what its job requires, and set the standards of disclosure and assessment by that. The 1992 Guidelines for Conawapa were more reflective of the reality of the integrated nature of the Whole Project. There is precedent for the fact that guidelines should be based on the requirements of the job, and not the other way around.

### ***Deficiencies Relating to Scope of the Review***

## Effects of Existing Segment

49. Hydro presents the existing impacts as a given we can do little about and should just accept. Since it is operating without a licence, this attitude is hardly surprising. Existing impacts are the given “set in stone” baseline against which we should measure incremental effects of Wuskwatim.
50. Hydro then presents Wuskwatim as adding little “new” harm, but instead feeding off the harm that has already been done, as if this is acceptable. It states that Wuskwatim will be “low impact” (NFAAT overview p. 9; ch. 4, p.9). This is backwards reasoning. When an environment (including social impacts) has already been severely damaged, there is less capacity to absorb and justify any more damage.
51. To compound this misrepresentation, Hydro represents its existing hydro project as clean and renewable (see, for example, NFAAT overview pp. 4, 16; ch. 4, p. 8). This assertion, made without mention of evidence to the contrary such as the 2001 conclusions of the Interchurch Inquiry into Northern Hydro Development and without assessment and public review is at best irresponsible.
52. The Applicant and others have repeatedly and publicly testified to the serious, ongoing and growing environmental and social harms from the Existing Segment. Manitoba Hydro itself acknowledges in some forums that there are serious impacts. For example:

[CBC Reporter Kurt Petrovich:] “The chairman [sic] and CEO of Manitoba Hydro says the mega-project has had a profound effect

on the people of Cross Lake. Bob Brennan says it wouldn't be built today." [Brennan:] "No, a \$100-million [offer] does not erase that which we did. I mean, we did it, and I certainly don't think Manitoba Hydro would do that today. I'm positive of it, and yet that was acceptable for conditions of the day."

Transcript, CBC Radio 7/4/98.

Manitoba Hydro's past Minister also acknowledged the damage in clear terms:

"No one's going to deny that, you know, there were travesties, that there was the victimization of a people, which has had terrible effects on them. No one's going to deny that."

Minister David Newman, reported in the Globe & Mail 11/5/98, p. A4.

53. Yet Manitoba Hydro asserts to the Commission that hydro produced by the Existing Segment is clean and renewable. This is a significant misrepresentation.
54. Assessment and review of the Existing Segment should correct these deficiencies.
55. In obtaining this information, the Commission should require accounting for externalities from the Existing Segment including professional estimation of costs of remediation and mitigation.

### **Effects of Future Segment**

56. Manitoba Hydro's filings mention future plans but offer no information as to the nature and scope of what would transpire if the existing course continues to be followed, nor any assessment of the nature and scope of its effects.
57. It is not suggested that other elements of the Future Segment should or can be assessed in the same detail as the Wuskwatim Project. However, a diligent effort should be made to identify the likely scope of impacts of following the path of which the Wuskwatim Project is just the next step. Worst-case analysis is a standard tool for addressing such situations and it has often been used in environmental assessments in Manitoba.

### ***Deficiencies Regarding Types of Things Reviewed***

#### **Cumulative Impacts Analysis**

58. Cumulative impacts of any part and the whole of the Future Segment in combination with the Existing Segment cannot be assessed unless the effects of the Existing Segment are assessed. Since these effects are not now assessed, this cumulative effects analysis is seriously deficient and should be corrected by broadening the scope of assessment and review to consider the Whole Project.
59. Manitoba Hydro fails to examine any system-wide impacts from any part of the future development. Instead, each part is treated as a separate, almost disconnected unit. Wuskwatim, Gull, Notigi and Conawapa are held out as creating small "circles" of impacts around the immediate areas of the sites, with little or no overlapping impacts between them or on the system as a whole (see EIS s. 2.3 p. 12).

60. Thus, cumulative impacts from the addition of each element are portrayed as minimal. This is a serious deficiency and misconception. It should be corrected by analysis of the whole Future Segment, and clear direction to Manitoba Hydro to provide accurate and full information on system-wide and other impacts in regard to each part of the Future Segment.

### **System Wide Effects**

61. Manitoba Hydro fails to consider system-wide impacts of the Whole Project. Each part is treated as a separate, almost disconnected unit with local impacts around the immediate areas of sites, and little or no overlapping impacts between them or on the system as a whole (see EIS s. 2.3 p. 12).
62. Manitoba Hydro's filings fail to even recognize the concept of system-wide impacts (how one part of the hydro system will affect other parts). The focus of Manitoba Hydro's filings is the area immediately surrounding the proposed Wuskwatim dam (Early Morning Rapids to Opegano Lake). There is no discussion of consequential changes to the operating or water regime in other parts of the hydro system, or any potential effects (including cumulative effects) as a result.
63. This denial of system impacts is one that Manitoba Hydro has made for some time. President and CEO of Manitoba Hydro, in a letter to the Editor of the Winnipeg Free Press published August 6, 2001 stated: "the best information we have at the present time suggests that there will be no environmental impacts on [the Applicant] at Cross Lake from any of the possible hydroelectric developments currently being studied." For months thereafter, Manitoba Hydro responded to queries



about potential effects of the Wuskwatim Project on Cross Lake (affected directly by LWR) with the statement that CRD operations would not be affected by Wuskwatim. Only recently, after 18 months of insistence by the Applicant, has Manitoba Hydro acknowledged that the water regime on Cross Lake will be affected, and that the manner and degree of the effects will depend upon the market for the incremental power and energy.

64. There are likely many other system-wide impacts from Wuskwatim, which by its nature is to become part of a much larger hydro system. And the very nature of this hydro system – regulating the flow of water from one area through and to other areas – is interconnectedness. It is impossible to understand any aspect of the system as existing in isolation from the whole.
65. At the same time Hydro denies system impacts, it creates an economic justification argument for Wuskwatim that would require system impacts. Manitoba Hydro's export price forecast for Wuskwatim assumes that output from this project can be marketed during on-peak periods when export prices are highest. However, the Wuskwatim project would actually produce much of its output during low-price off-peak periods. Manitoba Hydro is assuming that the rest of the hydro system can and will be used to store Wuskwatim's off-peak output, so that it can be exported during peak periods.
66. It may be that Manitoba Hydro failed to acknowledge there will be system-wide impacts because these impacts cannot be assessed without examining how the output from Wuskwatim will be marketed. There is currently no firm contract in place to sell Wuskwatim's output, which would in part establish an operating regime and identify system-wide impacts associated with that. This creates significant uncertainty

about these impacts. For different LWR operating regimes, there are widely varying system impacts.

67. This is not a new problem. In 1979, the Commission of Inquiry into Manitoba Hydro said:

The failure to recognize the importance of these export markets and hence to develop an appropriate strategy of consistently arranging firm sale contracts in advance of construction commitments has been a major deficiency in Hydro's planning and development process.

68. If the review proceeds without any firm contract in place, there will be uncertainty in regard to system impacts. This can be handled in part by providing and analyzing likely and worst-case scenarios. If a firm contract is in place soon, it will not eliminate variability of operations and impacts, since not all the output from Wuskwatim would be sold through firm contracts. Therefore, the EIS should also consider potential effects beyond the contract, and after termination of the contract.

### **Need For, Alternatives To, Justification of the Project**

69. The questions as to whether we need this development, and whether there are better alternatives, have a primary effect on the determination of whether we can justify it. If it can be established that we need a development to provide heat for our homes in the cold of winter, this need is more likely to justify certain environmental and social costs that would not be justified if we just thought it might make money. Likewise, assuming we need the energy but could acquire it through more economically, environmentally or socially advantageous

alternatives, the relative disadvantages from proceeding with the proposed hydro development may not be justified.

70. The *raison d'être* of Wuskwatim and other future dams is export – a fact which must be front and centre in any discussion about need, alternatives and justification. These issues are fundamentally different for an export-oriented project.
71. Need and alternatives are completely misconceived and misrepresented. Contrary to the terms of reference for the review, there is no analysis of justification of the project.

## **Need**

72. “Need” means our need for power and energy. It is not to be confused with the existence of an export market. Considerations of export potential are legitimate, but these considerations are about economic benefit, not about need.
73. Manitoba Hydro wrongly presents economic benefits and export of energy and capacity in the guise of need.
74. The conceptual flaw in Manitoba Hydro’s approach of using export markets to establish need, becomes clear in its interface with the issue of alternatives. If the purpose is to provide power and energy south of the US border, the alternatives should include wind generation south of the US border rather than in Manitoba (which is the wind alternative Manitoba Hydro considers). There is no evidence that Minnesota, for example, needs or even wants wind generation from Manitoba. The assessment does not even consider the likelihood that Minnesota wind generation would be displaced and rendered uneconomic by the

Wuskwatim Project, aided by the subsidy of Manitoba Hydro's unlicensed ability to cause unregulated damage to the environment. In other words, to treat an export market as "need" would lead the Commission into a quagmire of contradictory concepts.

75. Based on the conventional definition of need as domestic need (or possibly domestic demand), there is no need for the proposed development.
76. The Guidelines for the EIS themselves clearly establish that the purpose of Wuskwatim is not to meet energy needs of the province. The Guidelines state: "the general purpose of the proposed development is to take advantage of export opportunities over the 2009 to 2018 time frame" (s. 2.1).
77. Manitoba Hydro asserts that Wuskwatim will eventually be needed for domestic purposes (in 2020). This may or may not be true, and the Applicant asserts that this is a weak claim. Even if this does prove true in the future, the Wuskwatim Project should not be considered now on the basis of a tenuous claim for domestic need well in the future. Much can change over the 11 years between 2009 and 2020. The Commission should be fully aware that the decision now facing them is not whether to approve an 11-year advancement in Wuskwatim construction (with the associated environmental impacts), but rather whether to build this development at all and if so subject to what conditions. Circumstances might change such that it might never be built for domestic purposes.
78. "Need" has thus been misconceived in the filings. This is a serious deficiency that must be corrected now so as to prevent a dangerous skewing of the entire review.

## **Alternatives**

79. From need follows alternatives for meeting that need. No need has been established by Manitoba Hydro for energy in the province in any timeframe in which the proposed development should be considered.
80. What has been presented is an argument for economic benefit (through export). As such, alternatives to meet demand in export markets should be considered, but in this light.
81. This must include alternatives in those markets (such as wind, efficiencies and conservation in Minnesota). Manitoba Hydro's filings fail outright to consider such alternatives. Manitoba Hydro only presents alternatives of supply and DSM in Manitoba. As noted above, this glaring omission means that it cannot be said whether there is even a "need" for energy there that this development could or should fill.

## **Justification**

82. The justification analysis is completely omitted from the filings, and is essential.

## **Correcting the Deficiencies**

83. Some of the deficiencies can be cured by broadening the scope of the review to consider the Whole Project.

84. In addition, Manitoba Hydro should be instructed as follows in regard to presentation and analysis of impacts:
- a. All impacts must be thoroughly and accurately presented and analysed, including system-wide and cumulative impacts.
  - b. There must be an adequate level of disclosure to enable the public to effectively participate and assist the Commission, as the process requires.
  - c. Air emissions should not be weighted more than other types of impacts.
  - d. Other impacts and impacts overall should not be denigrated by referring to the Existing Segment as clean and renewable.
  - e. Impacts of the Existing Segment should be assessed, and a “full cost accounting” should be undertaken in regard to existing impacts (once these are known).
85. The NFAAT analysis should be corrected as follows:
- a. Need should be conceived of and presented as domestic need, or as a poorer second choice, domestic demand. Any benefits from export should be presented as just that – benefits – and attendant costs should be fully presented.
  - b. Alternatives for export should include alternatives of DSM and other supply in the export market.

c. A full justification presentation and analysis must be included. It is completely absent now.

86. Until the deficiencies are cured as above, public review cannot legitimately proceed. Even if the issue of expanding the scope of review was not before the Commission, public review should not proceed with these deficiencies in the filings. They are so serious and fundamental that proceeding without correction would likely ensure that the substantive outcome will be misdirected and perhaps dangerously wrong.