

February 3, 2012

Manitoba Conservation
Darrell Ouimet, Environmental Officer
Env. Assessment and Licensing Branch
123 Main St., Suite 160
Winnipeg MB R3C 1A5
CANADA

Re: Keeyask Generation Project Scoping Document (File #5550.00)

Dear Mr. Ouimet

Introduction

Please find below Manitoba Wildlands comments on the *Keeyask Generation Project Scoping Document* (Scoping Document) (Manitoba *Environment Act* Proposal File #5550.00). Out comments in the document are organized to correspond with the headers found in the Scoping Document. When a section of the Scoping Document is cited in the document it can be found under the same corresponding header in the Scoping Document.

Our efforts in research and review to provide comments are intended to assist the proponent, Manitoba Hydro (MH), Manitoba Environmental Assessment and Licensing Branch (EALB) and the Canadian Environmental Assessment Agency (CEAA). Our efforts and comments are provided in the public interest, and to increase certainty, quality of assessment, consultation, technical and scientific content for the EIS. In turn the efforts of Manitoba Wildlands are intended to inform, strengthen, and support the project review, assessment, and licensing process.

We take these steps because major projects impacting significant areas of Manitoba's lands and waters, while spending or borrowing significant amounts of public funds, must have the highest quality of planning, access to information, environmental impacts assessment, public reviews, and licensing processes. In the present case the government is in essence licensing itself through a crown corporation and setting its own EA standards. We therefore expect that an outside critique of the scoping document is not only needed, but welcomed by MH, EALB, and CEAA as well needed.

Canada and Manitoba have agreed to carry out a cooperative environmental assessment under the *Canada-Manitoba Agreement on Environmental Assessment Cooperation* (2007). Given that this is a cooperative environmental assessment in which joint federal and provincial Environmental Impact Statement (EIS) guidelines will be arrived at, we find that at times it is necessary to inform the EALB review by looking at the CEAA

“*Background Information Document: Keeyask Generation Project*” (CEEA Background Document).

The next stage of the review will be to arrive at joint federal (CEAA)/ provincial (EALB) EIS guidelines which the proponent will be required to follow in the drafting of the EIS. It is also anticipated that the Keeyask Generation Project will be subject to review by the Clean Environment Commission (CEC). The EIS guidelines therefore also need to inform the terms of reference from the Minister of Conservation to the Chair of the CEC in regards to the expected CEC hearings and recommendations regarding the Keeyask Generation Project.

1.1 Background

Scoping Document claims: “the [Keeyask] Partnership will complete the EIS in accordance with the *Canadian Environmental Assessment Act* and *The Environment Act* (Manitoba).”

The EIS Guidelines, and recent EIS, CEC recommendations, and license for the Wuskwatim Generation Project need to inform the EIS.

1.2 The Project

The Scoping document is weak in its description of the Project. It should be noted there is a previously licensed project for infrastructure use, and a forthcoming project for transmission. In reality these Keeyask projects must be included in the description.

How much is the Project being constructed to meet Manitoba’s future electricity needs vs. to satisfy contractual export obligations? We expect the proponent to include a 20 year forecast of how much of the energy produced they anticipate will be used domestically vs. how much will be exported.

1.3 The Proponent

Scoping Document states:

The Partnership is comprised of four limited partners and one general partner. ... The EIS will describe the corporate governance structure and identify corporate accountability for management of the Project...

We expect the EIS to include and expand on the information about the partnership found in Public Utilities Board (PUB) *Order # 5/12*.

1.4 Regulatory Framework

Who Determines Scope?

According to the Keeyask Generating Station Scoping Document:

“The EIS will describe the *scope of the Project, as defined by the Proponent (emphasis added)*, and the scope of the assessment to meet the requirements of both the federal and provincial (Manitoba) approvals processes.”

This statement is clearly erroneous, as we have already indicated in our submission to CEAA on the Keeyask Background Document, s. 15 of *Canadian Environmental Assessment Act* clearly states that the responsible authority is accountable for determining scope in the case of a screening or comprehensive review.

Moreover, s. 12(5) of Manitoba’s *Environment Act* makes it clear that the Minister has the authority to request additional information, issue guidelines, or require the proponent to prepare assessment reports to deal with issues, as the minister deems necessary. Clearly then even under Manitoba’s *Environment Act* the responsibility for scoping a project falls to the minister, not the proponent.

See 1.1 above. The proponent would expand its social license to operate by acknowledging the roles of all parties involved in ‘scoping’ the project, arriving a EIS guidelines (for EIS contents) and reviewing the same.

If the EIS is to satisfy the requirements of both Manitoba’s *Environment Act* and the *Canadian Environmental Assessment Act*, then the project must be scoped appropriately. The scope must be at minimum the project as proposed by the proponent, but regulators can enlarge or limit the scope where appropriate. In evidence of this proposition please see the CEAA *Operational Policy Statement: Establishing the Project Scope and Assessment Type under the Canadian Environmental Assessment Act* (December 2011):

The scope of project to be assessed must include at a minimum, and will generally coincide with, the project as proposed by the proponent. However, in some cases, the scope may, in accordance with sections 15 and 15.1 of the Act, be enlarged or limited based on the particular facts and circumstances of the project.

2.0 Scope Of The Project

Scoping Document states:

...the EIS will include an explanation of the purpose of the Project. In doing so, the EIS will consider the Partnership's market for production from the Project, including requirements for electricity from dependable sources with no or low emissions of greenhouse gases.

The EIS guidelines should require an explanation of requirements for "dependable sources with no or low emissions." Whose requirements? Manitoba Hydro? Purchasing utilities in Minnesota/Wisconsin?

Will this analysis of "electricity from dependable sources with no or low emission of greenhouse gases" include the contributions that demand management techniques could make to meet future energy supply? Will this include an analysis of generating power from wind? Nuclear? Natural Gas? And even building other dams, such as the more cost-effective proposed Conawapa generation facility first, and holding off on building Keeyask?

Both regulators will require transparent information about these claims.

The Scoping Document also states:

The Minister responsible for Manitoba Hydro has indicated the Province of Manitoba will have an independent body undertake a review of the need for and alternatives to (NFAT) major new hydroelectric projects. This will include an assessment of the Keeyask Generation Project. ... As such, the EIS will not include an assessment of Manitoba Hydro's markets, the economic feasibility of the Project, or alternatives to the Project.

An NFAT analysis needs to be one of the first steps to justify any decision to commence, or not commence, with any given project. If the an independent body is going to undertake a NFAT analysis on major new hydroelectric projects in Manitoba then this needs to be made explicitly clear. The announcement of this independent body, and any terms of reference for the review need to be made public immediately, as we should not be commencing with the environmental review until after the NFAT analysis have been done. Results must be available early in the Environment Act proceedings.

To this end we would direct Manitoba Conservation's attention to PUB *Order #5/12*, which states:

[Manitoba Hydro's] ...business plan is incomplete, lacks required detail and has not been tested through what has been promised as a "Needs For And Alternatives To" (NFAAT) review by an independent tribunal that will have full access to the economic and financial assumptions which underpin MH's business plan.

...

In addition to providing a detailed review of the economic and financial assumptions of MH's preferred development plan, an NFAAT for MH's proposed investment would also test a number of viable alternative development plans, which is necessary to ensure that electricity rates for Manitobans remain just and reasonable and in the public interest.

...

It greatly concerns the Board that without having had its capital plans reviewed through an NFAAT proceeding, and without the US transmission lines required to transmit MH's electricity exports south of the border having been constructed or even been committed to, and without MH having obtained the required regulatory approvals in Canada, MH continues to spend \$1-\$2 Million per day on its currently favoured development plan.

There has been no announcement of when, how, or what independent body (presumably Manitoba's Public Utilities Board PUB) will conduct this NFAT review of major new hydroelectric projects – or of the Keeyask Generation Project. The NFAT analysis is needed at the preliminary stages to inform the rest of the environmental effects assessment, so without an open, public, and thorough NFAT analysis an open, public and thorough assessment for a license has not been conducted.

If the Manitoba PUB has been asked to undertake the NFAT analysis there is nothing on the web site to this effect, and no public announcement etc. We would observe that the affected and concerned publics involved in reviews for a new generation station are not necessarily the same publics or organizations that participate in PUB hearings regarding rates for energy in Manitoba. This NFAT analysis is needed early in the sequence of materials, reviews, etc. regarding Keeyask Generation projects.

Moreover as we have already indicated in our submission to CEAA on the Keeyask Background Document, a NFAT analysis is required for a proper review under s. 16 of the *Canadian Environmental Assessment Act*.

We would also direct you to the Manitoba Clean Environment Commission (CEC) recommendations 6.1 to 6.5 on Wuskwatim Generation and Transmission Project which call for more thorough NFAT analysis.

Scoping Document states:

While, the EIS considers the manner in which certain agreements influence the design criteria, adverse effects programs, and hiring preferences of the Project, the agreements per se are not within the scope of the Project for which regulatory approval is being sought and are not subject to review in the environmental impact assessment.

All agreement, including agreements with proponent Keeyask First Nations (KCN), and export contracts signed by Manitoba Hydro that require the building of Keeyask need to be made publicly available. We as Manitobans are effectively the shareholders of hydro and therefore are entitled to disclosure of the agreements being made – save for proprietary and confidential information.

Those agreements specific to the environmental components should be part of the EIS. MH has avoided even providing the contents for environmental management plans (EMPs) in the past.

2.1 Site Information

Scoping Document claims the EIS will include a “site location map” which identifies “owner(s) of the land” and the “Proponent’s plan” for hydroelectric development.

Site location mapping also needs to include resource management areas, trapline districts, current, future, and intended projects, any mineral, aggregate, or forestry rights/leases/dispositions etc. granted (not just those that are being actively utilized), maps of all Manitoba Conservation Data Centre species data s1 to s5 (not just S1 and S2 data). Manitoba Conservation holds extensive information about species in the project region. Manitoba Hydro holds extensive ecosystem and species information for the project region. All of this data should be used in the EIS. (Note: Manitoba Hydro collected baseline data between 1989 and 1992.)

2.2 Project Description

According to the Scoping Document:

The principal structures consist of a powerhouse complex, spillway, dams and dykes. ... Supporting infrastructure will consist of permanent facilities ... and temporary facilities ... Permanent infrastructure includes roads, borrow sources, work camps and work areas, off-ferdams and a construction ice boom. Temporary infrastructure includes roads, borrow sources, and boat launches and a portage.

The CEAA Background Document identifies a 93 square kilometre reservoir and 45 square kilometres of initial flooding that will occur as a result of the project (*but the Keeyask Scoping Document is silent on this*). This will indeed have significant environmental impacts that will lead to shoreline erosion, and greenhouse gas (GHG) emissions. Manitoba Hydro needs to provide the complete project description, and we expect EIS guidelines to require it.

We feel the project description could be more clear in defining ancillary related infrastructure. We see no mention of a substation, and there is only a brief mention of transmission facilities that will necessarily be required to make the project functional in Attachment F of the Scoping Document. All three (or more) Keeyask projects (infrastructure, generation, transmission) need to be identified in the EIS, with an explanation of who the proponent is for each project (Manitoba Hydro v. Keeyask Hydropower Partnership Limited).

We expect an improved *Attachment E: List Of Past, Current And Future Projects And Activities* of the Scoping Document and any other existing, future, connected, or foreseeable projects will be part of the EIS. We will just once again highlight that any and all mineral, aggregate, or forestry rights/leases/dispositions etc. granted (not just those that are being actively utilized), and Manitoba Conservation Data Centre species data s1 to s5 (not just S1 and S2 data) should be included in this review. See above regarding data held by Manitoba Hydro and Manitoba Conservation.

2.3 Activities to Construct, Operate and Decommission The Project

The Scoping Document claims that:

“...it will not be practical to describe in detail the manner in which the Project’s permanent facilities will be decommissioned ... the EIS will include the Proponent’s commitment to comply with legislated licensing requirements”

As already indicated to CEAA consideration of the eventual need to decommission the project, the justification, needs for the project, and the alternatives to the project, are all

explicitly required by the *Canadian Environmental Assessment Act* [see s. 15(3) & 16(3)].¹ This means the EIS should include this information.

The CEAA Background Document also identifies temporal boundaries which encompass the lifespan of the Project, “which is the duration of use until it is deemed necessary to be decommissioned.” Manitoba Conservation therefore needs to take a similar approach that considers the entire lifespan of the project.

We would also point out that standards Manitoba Hydro purports to support, including the Principles and Guidelines of Manitoba’s Sustainable Development Act and the International Hydropower Association Sustainability Protocol require that decommission plans for generation stations be prepared.

To provide an example the Sustainable Development Principles and Guidelines call for the implementation of “full-cost accounting” and a need to manage “for the benefit of present and future generations,” and “consider the need for rehabilitation and reclamation in future decisions and actions.” Clearly there can be no full-cost accounting or inter-generational analysis if the need for the eventual decommissioning is not considered – even if the time-line for decommissioning is 50 years or more ahead.

Lastly it should also be acknowledged that the most recent set of public hearings regarding a new generation station in Manitoba discussed the need for decommissioning plans for future generation stations.

2.4 Accidents and Malfunctions

Scoping Document states:

“...discussion will focus on the following potential occurrences:
Cofferdam failure; Dam failure; Fires; and Spills of chemicals and hazardous materials on-site.”

It is important to consider the impact that a changing environment will have on the proposed project. In many ways this is a necessary extension on the cumulative effects analysis. Increasing planetary temperatures will result in changing hydraulic flows and increased weather extremes. The impacts therefore that climate changes will have on the future viability of the project, and the likelihood of accidents or malfunctions needs to be assessed.

2.5 Alternate Mean of Carrying Out The Project

¹ *Supra* note 4.

The current alternate means analysis discussion found in the Keeyask Scoping Document is clearly deficient. As it really only considers other ways to construct the Keeyask Generating Station on the same site near Gull Rapids. This is inadequate, and should include alternate options to the project itself.

As stated by Campbell, J. in *Alberta Wilderness Assn. v. Cardinal River Coals Ltd.*:

...simply identifying potential "alternative means" without discussing their comparative environmental effects fails to provide any useful information to decision makers, and fails to meet the requirements of paragraph 16(2)(b) of [*Canadian Environmental Assessment Act*] CEAA.

We expect that the consideration of “need for” and “purpose of” the project includes an analysis of why the proposed generation project would be built; to meet Manitoba’s future electricity needs vs. to satisfy contractual export obligations. This EIS content should include current domestic demand, and projections for future domestic needs. See our comments above.

We expect that the alternative means considered will not be restricted solely to potential redesign options for the proposed generation station, but will also consider the possibility of meeting future electricity demand through enhanced conservation measures, alternative forms of energy production such wind generated electricity, and even building other dams, such as the more cost-effective proposed Conawapa generation facility first, and holding off on building Keeyask.

2.6 Mitigation and Offset Programs Pre-Determined By The Partners

Scoping Document states:

Programs have been developed to provide appropriate replacements, substitutions or opportunities to offset adverse effects of the Project on each Keeyask Cree Nation. ... These programs will be describe and considered in the environmental assessment.

But this deals only with Keeyask Cree Nations, not with other affected First Nations, northern affairs communities, etc. who will also be affected by the project.

Environmental Effects, Significance of Environmental Effects, & Mitigation Measures

In determining the environmental effects, significance of those effects, and mitigation measures regarding the Keeyask Generation Project it would be helpful to consider

environmental effects, significance of those effects, and the success of mitigation measures for Manitoba Hydro hydroelectric generation projects already in operation. This survey of the impacts and effects of operating hydroelectric dams need not be limited to Manitoba but could also attempt to identify effects from hydroelectric dams in other jurisdictions. This will also help to establish how well environmental effects can be predicted.

As indicated in the CEA Background Document, the hope is to move forward in a precautionary manner. If a review of existing generation stations shows a high degree of predictive uncertainty then clearly additional precaution and scrutiny will be required before moving forward. We recommend the proponent's aside as to a precautionary approach in its Scoping Document *be taken as an indication that precaution needs to be a criterion throughout the EIS*. Perhaps the EIS Guidelines need to specify the precautionary approach so the proponent will move beyond its aside using definition, examples, and predictive modelling.

3.0 Assessment Information and Methodology

3.1 Major Agreements Leading to The Partnership And Project

Each of the communities led consultations with their respective members to determine and present their own evaluations based on their own worldview of the environmental effects of the Project ... each of the KCN has made its own decision to support the Project. These decisions are beyond the scope of the environmental assessment... The KCN may provide reports explaining their evaluations of the Project to assist other process participants to understand their independent decisions to be Project proponents.

Scoping Document states:

3.2 ATK, Local Knowledge and Technical Sources

Scoping Document states:

The EIS will provide *a list* of studies undertaken by the Proponent and relied upon for the purposes of the environmental assessment.

Also note *Attachment A* of the Keeyask *Environment Act* Proposal Form (EAPF) submitted December 2011 states on pg. 2 of 4:

A wide range of previous investigative, engineering and environmental studies have (sic.) been conducted. Some of these have not yet been completed. These studies will be finalized and used in developing the environmental impact statement (EIS). The studies will be more fully described in the EIS.

The Keeyask Hydro Power Limited Partnership website lists a number of studies have been undertaken, including:

Aquatic Environment Studies

- Aquatic habitat
- Aquatic plants and invertebrates
- Fish community – populations, spawning, and movements
- Lake sturgeon – species of special interest
- Fish quality – mercury

Physical Environment Studies

- Air quality
- Climate and climate change
- Noise
- Geology and soils
- Water levels and flows
- Ice processes
- Shoreline erosion
- Debris
- Peatland disintegration
- Sedimentation
- Groundwater
- Surface water temperature
- Dissolved oxygen

Terrestrial Environment Studies

- Vegetated habitat classification and mapping
- Rare plants
- Insects
- Amphibians
- Songbirds, raptors and waterfowl
- Small mammals (e.g. voles, rabbits, mice)
- Furbearers (e.g. beaver, muskrat, mink, otter)
- Large mammals (e.g. caribou, moose)

Heritage Resource Studies

- Burial sites

- Heritage resources, such as pottery or bone fragments from pre-contact to the historic period
 - Culturally important sites
- Socio-Economic Environment and Resource-use Studies**
- Land and resource use for traditional, recreational and commercial purposes
 - Local and regional economy, including employment and business
 - Population, housing, infrastructure and services
 - Transportation, navigation safety and access
 - Community health
 - Culture
 - Social well-being and quality of life

Yet, to our knowledge none of these studies, or the results thereof are available on Keeyask Partnership or Manitoba Hydro websites. For public participants to undertake their reviews these would need to be available. We would expect these studies - save for any proprietary or confidential information contained therein – to be made available in advance of the EIS Guidelines being released. If public participants are to thoroughly review the project EIS then access to supporting studies and data is imperative. An environmental effects assessment cannot be based on inaccessible reports.

3.3 CONSULTATION AND INVOLVEMENT PROGRAM

3.3.1 Public Involvement – Aboriginal People

The Scoping Document statement fails to realize that the proponent (Manitoba Hydro) is not the Crown, stating:

The EIS will describe the consultation and involvement processes with the Keeyask Cree Nations (KCN), other First Nations, and Metis related to the environmental assessment.

The Manitoba Crown is responsible for ensuring that the constitutionally required duty to consult with aboriginal people is fulfilled.

In *Haida Nation v. B.C. (Minister of Forests)* the Canadian Supreme Court held that the proponent (in this case Weyerhaeuser) does not owe a duty to consult. Although the Crown may delegate procedural aspects of consultation to industry proponents, the legal responsibility, stemming from the honour of the Crown, remains with the Crown.

It is the Crown's responsibility to conduct the consultation; by relying on the proponent it undermines the credibility of the consultation process. The Crown needs to take the lead on this project rather than relying on Manitoba Hydro.

The following statement from the Scoping Document is problematic.

“...the KCN may provide reports explaining their evaluations of the Project to assist other process participants to understand their independent decisions to be Project proponents.”

Having First Nations who are presently contractually invested in the hydro-electric project provide reports to other first nations who are not contractually invested in the proposal to “assist” others to “understand” and make “independent decisions” is extremely problematic. The KCN First Nations are now proponents as much as they are affected First Nations. These non-KCN First Nation and Metis communities need to be able to assess their own needs. It is good to know that KCN and Manitoba Hydro are willing to share information. This indication that reports will be made public is helpful.

The Scoping Document also describes the EIS content as follows:

“In describing the consultation and involvement processes, the EIS will provide the following:

- Community contacts information;
- The use of communication tools employed to provide and/or collect information, including newsletters, radio and television broadcasts, open houses, community meetings, and other forums;
- A list of factors suggested by the First Nations and Metis for inclusion in the EIS, whether or not the factors were included, and the rationale for exclusions;
- A description of traditional territory, as provided by the parties;
- Based on information provided by the parties, the manner in which the respective parties currently make use of areas potentially affected by the Project (e.g., for hunting, fishing, trapping, or harvesting of other resources, access to sacred sites or burial grounds or similarly traditional uses);
- Potential adverse effects to these activities that the project may cause; and
- Proposed measures to avoid, mitigate and/or monitor these potential effects.”

Once again it is the Crown, not Hydro, that should be conducting the consultation.

In looking at the list of Aboriginal groups that have been contacted we notice there are other communities that need to be contacted, who are potentially affected by this project. Shamattawa is conspicuously missing from the list, despite being rather proximate to the other First Nations that have been contacted, and to the project. Additionally there are numerous Northern Affairs Communities (which are predominantly Aboriginal residents) potentially affected by the project.

Moreover, in addition to the public consultation as part of the environmental assessment, and consultation required under s. 35 of the Canadian Constitution; it also needs to be recognized that there are provisions in the Northern Flood Agreement, which is itself a modern day treaty, that require additional consultations with the five signatory First Nations, as they are considered to be affected by this and other Hydro projects. Canada, Manitoba and Manitoba Hydro are of course all signatories to the Northern Flood Agreement.

3.3.2 Public Involvement – Other Publics

The scoping document emphasizes consultation with local people only:

“...the EIS will describe the involvement of other publics in the environmental assessment. Generally, the public will include local residents (other than those who are First Nation and Metis);”

Manitoba Hydro appears to forget that all Manitobans are affected by this project due to our public utility’s interest to build the Keeyask Generation project. Therefore open houses and community meetings across Manitoba, including in Winnipeg, will be expected. All ratepayers / taxpayers in the province are potentially impacted by this project.

PDFs That Can Be Copied & Stand Alone Graphics

We only received a pdf file of the Keeyask Scoping Document that allowed the ability to copy and paste text, along with stand-alone larger copies of the images provided in the Scoping Document on January 24, 2012. We expect in the future that Manitoba Conservation will ensure that all pdfs provided can be copied from and stand alone high-resolution copies of any images included will also be made available. This simply makes it easier for public involvement.

Cross-References To Related Files For Cumulative Effects Analysis

The Manitoba Conservation Scoping Document “Attachment E: List Of Past, Current And Future Projects And Activities” includes references to a number of related and proximate developments. It is encouraging to see this list, although more could be added. From an access to information perspective it would greatly help to improve public

participation (thereby helping to satisfy the requirements of s. 38 of the *Canada–Manitoba Agreement On Environmental Assessment Cooperation*) to include cross-references to the Environment Act public registry file number and/or CEAA registry reference numbers of these related and/or proximate projects. This is simply a reflection of the fact that making information more easily accessible, will help to ensure a more thorough review. In addition to cross-references to the related environmental assessment registries, we would also encouraging cross-references to other relevant studies, legislation, regulations, etc.

3.4 VALUED ENVIRONMENTAL COMPONENTS

While we appreciate that there has been some attempts to follow the recent advise of CEC Chair Terry Sargeant, it is inadequate to simply state:

The EIS will explain the rationale for the selection of each VEC,” is not adequate. There should have been at least a tentative list of valued environmental components (VECs) included in the Scoping Document.

We expect the EIS guidelines, and EIS to include at least the list of environmental components (ECs) provided in the CEAA Keeyask Background Document (see Table 1 on p. 6).

In addition to the list provided in Table 1 of the CEAA Keeyask Background Document we provide the following list of potential environmental impacts from large hydroelectric reservoirs and generation stations:

- Surface Ground Water Quality
- Interrupting Natural Cycles
- Flooding
- Erosion
- Scarring Riverbeds
- Removing Sediments
- Impacts on Water-Crossings for Trappers and Wildlife
- Impacts on Flooded Peatlands
- Starving/Over-Saturating the River
- Changing Water Temperature
- Fish Migration/Fish Ladders
- GHG Emissions
- Entrainment
- Mercury

3.5 SPATIAL AND TEMPORAL BOUNDARIES

The Scoping Document states that:

The EIS will describe the predicted future environmental conditions and trends if the Project were not to proceed. The predicted future condition of the environment will help to distinguish Project-related effects from effects not attributable to the Project.

This should be changed to describe the predicted future environmental conditions not only if the project were not to proceed, but also the predicted environmental conditions if the project does proceed.

It is logical to have different spatial study area boundaries specific to each potential effect or environmental element, however we would stress that the EIS guidelines need to be explicit about the boundaries established for each effect/element. We expect requirements for these spatial boundaries to be described in the EIS guidelines. We also expect that the boundaries will be clearly shown on a map of the project area as well. (A chart with the proponent's basis for setting each boundary would be quite relevant in the EIS.)

3.6 CLIMATE CHANGE

We assume that GHG emissions from creation of the reservoir, flooding, ongoing erosion, all construction activities, and operation of the project will be covered in the EIS guidelines. Further the carbon inventory in all EC areas single and compounded should be included.

We also expect transparency on the estimated GHG emissions from the hydroelectric reservoir. We have reviewed *Greenhouse Gas Reports* section on Manitoba Hydro's website, but we are not able to determine what portion of Manitoba Hydro's GHG emissions are attributable to emissions from hydroelectric reservoirs.

A recent report by Global Forest Watch, which investigated hydroelectric developments in Quebec, suggests that estimation methods used by the Government of Canada to determine GHG emissions from hydroelectric developments may be underestimating GHG emissions by a factor of 20.

The Canadian Government, uses procedures recommended by the Intergovernmental Panel on Climate Change, and estimates that emission from hydroelectric reservoirs across Canada result in 0.5 megatonnes of carbon dioxide equivalent emissions per year.

This is in stark contrast to the research by Forest Watch which suggests the real total is anywhere between 7 and 13 megatonnes of carbon dioxide equivalent emissions. Part of the reason for the difference is that the government estimate assumes that reservoirs stop emitting carbon from submerged plants after about a decade, but this is out of date with more current research, which shows that actual net emissions extend way beyond 10 years.

The Keeyask reservoir (both from clearing activities and operations will have high initial emissions.

Manitoba Hydro claims, in collaboration with the Federal Department of Fisheries and Oceans, it has been actively monitoring GHG emissions from its reservoirs since 2000. However we were unable to locate these studies. These will need to be available for a valid EIS.

The assumptions about GHG emissions from hydroelectric reservoirs needs to transparent and stated up front. The Scoping Document fails to achieve this, and we expect this shortcoming to be rectified in the EIS guidelines and EIS.

3.7 PRECAUTIONARY APPROACH

The Scoping Document discusses the precautionary approach as follows:

The EIS will demonstrate that the proposed Project has been examined in a careful and precautionary manner. ... [identify] effects of the Proposed project ... [consider ways to] minimize adverse effects ... monitoring and follow-up activities. ... limitations in the information will be reported.

This is inadequate. A better precautionary approach can be found in a March 2003 *WHITE PAPER: The Precautionary Principle and the City and County of San Francisco* found on the Science and Environmental Health Network (SHEN) website:

- People have a duty to take anticipatory action to prevent harm;
- Proponents of products and services bear responsibility for the safety of those products and services;
- Decision makers will examine a full range of alternatives and select alternatives with the least harmful impact on environmental health and human health;
- Decisions will be participatory, transparent, and informed by the best available science and complete product information;
- Decision makers will consider a full range of costs of products and services, including manufacturing, use, and disposal. Economic evaluations will broadly consider long-term costs and savings of environmental policies.

The EIS guidelines and EIS will need to provide default, standards, and specifics as to the precautionary approach.

4.0 ENVIRONMENTAL SETTING

Scoping Document states:

The EIS will identify plants and animals named under the Species at Risk Act (Canada) and/or The Endangered Species Act (Manitoba), listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and identified as S1 and S2 species by the Manitoba Conservation Data Centre.

We expect that all species identified by Manitoba Conservation Data Centre, rank S1 through to rank S5 will be identified in the EIS and also included on a map(s) include in the EIS.

We assume studies on the “freshwater aquatic environments” will consider the effects due to changes in temporal dynamics of hydrological flows. We assume that the “wildlife and wildlife habitat” section will include, inter alia, an analysis of the potential impacts of the proposed project on various fish, plant species, caribou, and moose populations. We assume the consideration of navigation will include analysis of the effects faster water flows have on the ability and safety of crossing rivers, reservoirs, and adjacent waters by

winter trapline proprietors, other traditional lands users, and the loss of access to traditional areas due to safety concerns, varying water levels, flooding, etc.

5.2 CUMULATIVE ENVIRONMENTAL EFFECTS

A cumulative effects assessment, that requires an assessment of the environmental effects of the project in combination with other past, present, or reasonably foreseeable future projects or activities, is required in accordance with s. 16(1)(a) of the *Canadian Environmental Assessment Act*. Once again we would highlight *Appendix E* of the Scoping Document, which contains a list of past, present, and future foreseeable projects. In looking at the cumulative effects of this hydroelectric generation project it needs to be acknowledged this project is but one part of the plan to develop the Nelson River system for hydroelectric purposes. Keeyask will also be connected to a set of existing projects, and a set of intended future projects. Cumulative environmental effects content in the EIS should include all past, present, and future projects. This is also consistent with the most recent set of recommendations regarding a generation project from Manitoba's Clean Environment Commission.

In looking at the cumulative environmental effects we would suggest the EIS guidelines require the proponent to provide a map and supporting data which shows all mineral and aggregate dispositions, forestry licenses, road developments, town sites, former town sites or villages, all Manitoba Hydro sites, intended roads/closed roads, reservoirs, trapline districts designated by Manitoba 60 years ago, etc. within the project study area. This information is accessible from the Government of Manitoba and other sources, and the proponent needs to provide this information in its EIS submission. Currently the Scoping Document is silent on many of the elements inside the project area – which may be impacted by this project or have been, or previously experienced environmental effects.

The EIS Guidelines need to be explicit about requirements to included 5.0 Effects and 5.2 Cumulative effects within the project area.

6.0 SUSTAINABLE DEVELOPMENT

Scoping Document states:

The EIS will provide conclusions, and rationale for the conclusions, about the Project from the perspectives of sustainability and sustainable development consistent with the federal Sustainable Development Strategy, Manitoba Principles and Guidelines of Sustainable Development pursuant to The Sustainable Development Act (Manitoba), the KCN Principles regarding Respect for the Land (pursuant to the Joint Keeyask Development Agreement), and the Manitoba Hydro Sustainable Development Policy and Principles.

Need For Transparent Standards & Guidelines

Manitoba Wildlands would like Manitoba Hydro to adopt and make public guidelines, standards and policies for planning, construction, maintenance, operation and decommissioning of hydroelectric dams.

In addition, guidelines, standards and policies regarding other Manitoba Hydro projects; such as planning, construction, and maintenance of reservoirs, converter stations and transmission facilities should be made public.

The ideal approach would be for the Manitoba Hydro and Manitoba Conservation to arrive at generation and transmission system standards, including for reporting in relation to cumulative impact assessments, operations, environmental management plans, carbon inventories, green house gas (GHG) emissions, etc. These standards could be applied to both existing, and future transmission systems in Manitoba. For next transmission system projects (including those which are part of a new generation project) the joint standards could be written into the license.

Independent Review

Does Manitoba Hydro commission independent review of its EIS products. Does Manitoba Hydro put in place to make sure the EIS technical analysis, advice, and products it files for a license under Manitoba's Environment Act have adequate review before filing?

Sustainable Development Principles

In 1993, Manitoba Hydro adopted a sustainable development policy and 13 complementary guiding principles based on the principles and guidelines of sustainable development. These guidelines and principles are now enshrined in Manitoba's *Sustainable Development Act*.

Manitoba Hydro states the crown corporation will apply these principles in all aspects of its operations to achieve environmentally sound and sustainable economic development. We do not know if Manitoba Hydro has ever had independent analysis of its performance regarding these principles and guidelines.

To provide an example the principles and the guidelines espouse the implementation of "full-cost accounting" and a need to manage "for the benefit of present and future generations," and "consider the need for rehabilitation and reclamation in future decisions and actions."

Yet the scoping document claims:

“...it will not be practical to describe in detail the manner in which the Project's permanent facilities will be decommissioned.”

There is a need to consider decommissioning at the early stages of planning. There can be no full-cost accounting or inter-generational analysis if the need for the eventual decommissioning is not considered – even if the time-line for decommissioning is generations ahead.

Hydropower Sustainability Assessment Protocol

Manitoba Hydro is a signatory and partner to the International Hydropower Association's (IHA's) *Hydropower Sustainability Assessment Protocol* (HSAP). Yet nowhere in the CEEA Background Document, nor the Manitoba Conservation Scoping Document, is there any reference to HSAP.

HSAP sets out four assessment tools for reviewing a proposed hydropower project at different stages of development: 1) early stages; 2) preparation; 3) implementation; 4) operation. Based upon the protocol hydropower projects are given a rank from 1-5 (with 5 being the best) in terms of sustainability.

It would be very helpful for Manitoba Hydro to make it clear if it plans to adhere to HSAP and what sustainability rank it aims to achieve for Keyask. We assume Manitoba Hydro will adhere to the initiatives it supports.

Principles of Environmental Impact Assessment Best Practice

Manitoba Wildlands encourages Manitoba Hydro to abide by and adopt best practices standards, such as those outlined in *Principles of Environmental Impact Assessment Best Practice* by International Association for Impact Assessment (IAIA).

7.0 ENVIRONMENTAL MONITORING, MANAGEMENT AND FOLLOW-UP

The current practice of Manitoba Conservation EALB has been, not to place Environmental Management Plans (EMPs), Environmental Protection Plans (EPPs), and results of monitoring studies required as part of the *Environment Act* license in the public registry. We feel this is a huge mistake that undermines the public's ability to participate in the environmental review process. During the Wuskwatim hearings numerous promises were made that the EMPs and monitoring data required under the Wuskwatim *Environment Act* license would be made public. As we begin to look at licensing Manitoba's second hydroelectric generating station under the *Environment Act* it would be valuable to review the monitoring data and EMPs for Wuskwatim.

CONCLUSION

Manitoba Wildlands assumes the EIS Guidelines for the Keeyask Generation Station will guide Manitoba Hydro as to the contents for the EIS for this project. We assume there will also be public review of the draft guidelines.

We note that the first generation station to be built in Manitoba in twenty years is under construction. The steps and outcomes from reviews, hearings and licensing for the Wuskwatim Generation Station can inform the EIS Guidelines and EIS for the Keeyask Generation project. It should be noted that public meetings, with CEC facilitation and direction were part of the steps to arrive at EIS Guidelines for Wuskwatim. The guidelines, CEC recommendations, EIS Guidelines, EIS and license for Wuskwatim are relevant in the proceedings and decision making for Keeyask.

EIS Guidelines for Class 3 developments in Manitoba contain the public policy and regulatory framework (both federal and provincial), which the proponent is to include and provide responses to in the EIS. We look forward to that approach being taken in the EIS Guidelines and EIS for Keeyask. Various laws and policies of the Manitoba government apply to the Keeyask Generation Project. An example would be the *Climate Change and Emissions Reduction Act*, with applicable policies.

There are some troubling assumptions and omissions in the Scoping Document. Certainly Manitoba Hydro is aware that the affected publics and communities for Keeyask go well beyond the partners in the project and other local persons. And certainly Manitoba Hydro is aware that as proponent for the project the utility is not also the Crown for consultations with Aboriginal Peoples. It is our understanding that *Northern Flood Agreement* (NFA) First Nations also will be participating in meaningful consultations regarding Keeyask, as required under the NFA. Public open houses including in Winnipeg - as were undertaken for Wuskwatim - are expected.

Similarly, as a cooperative and joint effects assessment is underway for Keeyask, the proponent knows that all existing, current, and intended projects are part of the assessment. Given the lack of clarity in the Scoping Document about the previously licensed Keeyask infrastructure project, and the intended further Keeyask projects for transmission and other infrastructure, the EIS Guidelines will need to be specific and the proponent will need to provide information and response to all projects in the EIS.

The EIS Guidelines will also need to be specific about the amount of flooding, ongoing erosion from that flooding, and effects assessment requirements for the reservoir. We would note this Scoping Document is written as if there is no reservoir. As this is the first reservoir to be added to the hydro system in northern Manitoba in decades, it becomes essential that standards, information and review for the effects assessment of the reservoir are thorough. EIS Guidelines will need to be specific about the reservoir.

Project area is not provided at this time. Given that the region does and will contain several Manitoba Hydro projects, clear mapping and labeling is needed. (See our comments for further detail.)

CEAA points to ongoing effects from the new reservoir for Keeyask in its Background Document. It is time for the pattern of ongoing effects from flooding, reservoirs, varying water levels with respect to a generation station to become clear elements in the effects assessment for a generation station project.

Climate change content in the Wuskwatim EIS was limited. It is eight years later – and as our comments indicate knowledge about emissions from generation stations, and reservoirs has increased significantly. We expect the EIS Guidelines and the EIS to be up to date and transparent with respect to carbon inventory, green houses gases, etc at all stages of planning, construction, operation and decommission of this project.

The research conducted by Manitoba Wildlands for the first stage of public review for Bi Pole III, another Manitoba Hydro project, is available on our web site and in the public registry. We identified and attached a range of standards and criteria regarding EA, climate change, and consultation, etc which apply to this project. Manitoba Hydro ascribes or participates in certain of these standards.

We have used the headers and categories in the Scoping Document to provide comments. The contents here are not to be taken as complete at this time. Repetition or references to the CEAA Background Document and our response to it are intended to support the joint Environmental Effects Assessment being conducted by Canada and Manitoba.

Sincerely,



Gaile Whelan Enns
Director, Manitoba Wildlands

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