

# Proponent Compliance with Environmental Impact Statement Guidelines

Manitoba Hydro Keeyask Generation Station Project

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Manitoba Wildlands – January 2014

## ABSTRACT

Manitoba Wildlands has reviewed the joint Manitoba-Canada Environmental Impact Statement Guidelines for the Manitoba Hydro Keeyask Generation Station project in order to identify priority guidelines to be fulfilled by the proponent.



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## Overview

The purpose of this report is to highlight whether the Environmental Impact Statement (EIS) Guidelines for the Keeyask Generation Station (Keeyask Project) are complied within the EIS materials. The EIS Guidelines are a result of the agreement for harmonized EIS etc, between Manitoba and Canada. See transcript and Manitoba Wildlands closing statements, statements by the Chair of the CEC as to the EIS being based on both Scoping Document and these EIS Guidelines. Manitoba Wildlands has identified sections of the EIS Guidelines that , in our opinion, are not adhered to within the EIS materials.

The Keeyask Project EIS materials (including hearing presentations, late filings, IR responses etc.) need to comply with requirements set out within the Scoping Document and EIS Guidelines, both of which underwent public review. According the Canada-Manitoba Agreement on Environmental Assessment Cooperation (2007), a cooperative approach is taken by Canada and Manitoba for environmental assessment in which all requirements for both orders of government are satisfied.

## Disclaimer

The EIS Guidelines referenced in this document are taken directly from the Keeyask Generation Project EIS Guidelines.

Manitoba Wildlands assumes, based on statements made during the CEC hearings by the proponent, that both the Scoping Document for the project and the EIS Guidelines for the project are to be fulfilled by the proponent. Closing statements in the hearings from Manitoba Wildlands included some of the contents from this report.

We note given the life of this project is 100 years at least, and the proponent has assured the CEC during the hearing that it will follow through on its commitments for the full life of the project, the EIS Guidelines will need to be fulfilled for 100 years.

## EIS Guidelines

The EIS Guidelines are specific for the Keeyask project and sections listed below are those which Manitoba Wildlands found to be incomplete or unsatisfactory for a project of this scope and magnitude. References within this document are not complete sections of the Guidelines, but rather selected text. Italics and bold added by Manitoba Wildlands.

### 4.1 Proponent, pg 5

- Explain corporate and management structures.
- Specify the mechanisms that would be used to ensure that relevant corporate policies and EA commitments will be implemented and respected for the project

### 4.4 Regulatory framework and the Role of Government, pg 6

- Section should identify:
  - *Any treaty* or self-government agreement with Aboriginal groups that are pertinent to the project and or EA.
  - Any relevant land use plans, land zoning, or community plans that are pertinent to the project and/or EA.

### 6.2.1 Determination of Valued Ecosystem Components (VECs), pg 11

- EIS will describe *process used for identification of VECs*. VECs will be selected based on professional judgment interests and concerns raised by the public Aboriginal groups and government.
- The proponent shall also demonstrate how ATK has been integrated with western science in the identification and analysis of VECs.

### 6.2.2 Spatial Boundaries, pg 11

- Clearly indicate the spatial boundaries (LSA and RSA) that were selected to be examined in order to identify environmental effects. The EIS must contain a *justification and rationale for all boundaries* chosen including a reference to which models and data are being utilized.
- Study boundaries must be defined taking into account (where applicable) the spatial extent of potential environmental effects, traditional knowledge, and current and proposed land use by Aboriginal groups and ecological, technical and social and cultural considerations. These boundaries must also indicate the range of *appropriate scales* at which particular baseline descriptions and the Projects assessment of environmental effects are presented. The description of the project setting must be presented in sufficient detail to address the relevant environmental effects of the project.

### 6.2.3 Temporal Boundaries, pg 11

- The temporal boundaries of the studies should span all components of the Project: construction, operation, maintenance, decommissioning and reclamation of the sites affected by the project. Temporal boundaries shall also consider *seasonal and annual variations* related to the identified VECs for *all phases of the Project*.
- If the full temporal boundaries are not used, the EIS shall identify the boundaries used and provided a rationale for the temporal boundaries selected.

### 7.1 Public Participation, pg 12

- This section of the EIS will provide a description of efforts made to distribute project related information to the public and provide a description of the information and materials that were distributed during the consultation process

### 7.2 Aboriginal Consultation, pg 12

- The proponent will actively solicit aboriginal concerns *from groups other than the KCNs* during the course of the EA. The proponent will examine opportunities to mitigate the adverse effects of the project on Aboriginal groups' current use of lands and resources for traditional purposes and other Aboriginal interests

## 8 Existing Environment, pg 13

- The EIS will provide a description of the existing environmental setting of the study area, from a local and regional perspective, to provide context for an understanding of the potential effects of the project. The EIS will also describe trends and conditions in the current environmental setting. ***The description shall be in sufficient detail to permit the identification, assessment and a determination of the significance of potentially adverse environmental effects that may be caused by the Project, to adequately identify and characterize the beneficial effects of the project, and to provide the data necessary to enable effective testing during the follow-up program of predictions made in the EIS.***

### 8.1 Physical Environment: Land, pg 14

- The EIS will describe the following attributes in the relevant study area:
  - A description of local and regional physiology, geology and soil conditions. For areas to be flooded and eroded, the level of mercury and other potentially toxic metals in soils, particular for soils with high organic content and indurated soils.

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- A description of permafrost conditions that includes a description of the distribution of *permafrost, thermal conditions, ground ice, thaw sensitivity and active layer thickness*.
- Shoreline characteristic and areas of potential reservoir shoreline erosion conditions and the rate of shoreline erosion and recession.
- Peatland disintegration along shorelines and *inland areas*.

### **8.2.2 Terrestrial Environment: Fire Regime, pg 19**

- The EIS will describe the following attributes in the applicable study areas:
  - Fire history and;
  - *Fire regime parameters* relevant for vegetation, wildlife and ecosystem functions.

### **8.2.2 Terrestrial Environment: Wetlands pg 20**

- The EIS will describe the following attributes in the applicable study areas:
  - Describe the terrestrial and aquatic habitat functions;
  - Describe *the ecological function of the wetland in the surrounding ecosystem and adjacent land use*;
  - Parameters that affect wetland functions.

### **8.2.2 Terrestrial Environment: Species of conservation concern pg 21**

- The EIS will identify all plants and animals named under the SARA 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 MB Conservation Data Centre.
- The EIS will include information on composition, distribution, relative abundance, seasonal movements, movement corridors, habitat requirements, key habitat area, and general life history for the identified species.
- Identify all species listed on Schedule 1 of SARA and those recognized as “at risk” by COSEWIC that may occur in the project area, and at any other project component, using *recognized survey protocols to provide current field data*.

### **8.3.4 Land and Resource Use, pg 23**

- In describing the socio-economic environment, the EIS will focus on the following land and resource use attributes in the relevant study area:
  - Description of land including:
    - Lands with special designation (proposed and existing), focusing on the following
      - Federal and provincial park lands
      - Wildlife management areas

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- Areas of special interest (MB Protected Areas Initiative)
  - Ecological reserve lands and
  - Scientific sites
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- Based on information provided by Aboriginal groups or, if Aboriginal groups do not provide this information, on available information from other sources, a description of the following;
    - Current and proposed uses of land and resources *by each aboriginal group* for traditional purposes; hunting, fishing, trapping, cultural and other traditional uses of the land
    - Land and water access into the area by Aboriginal people
    - *Water and ice routes*, modes of transportation and timing of water/ice route usage

### **8.3.6 Traditional and Local Knowledge, pg 24**

- The proponent must incorporate into the EIS the traditional and local knowledge to which it *has access or that it may reasonably be expected to acquire* through applying the appropriate due diligence, keeping with appropriate ethical standards and without breaching obligations of confidentiality, as set out in section 2 of this document. Agreement should be obtained from *Aboriginal groups* regarding the use, management and protection of their existing Aboriginal traditional knowledge information during and after the EA.

### **9.1 Assessment Methodology, pg 24**

- All data collection methods, models and studies should be documented so that the *analyses are transparent and reproducible*. The degree of *uncertainty, reliability and sensitivity of models* used to reach conclusions should be indicated.
- *Model calibration information* should be available for independent review and assessment.
- If data has been extrapolated or otherwise manipulated to depict environmental conditions in the study area, *modeling methods and equations should be described and should include calculations of margins of error and/or confidence limits*.
- All conclusions regarding the receiving environment and predictions as well as the assessment of environmental effects *should be substantiated*. The proponent should support all analyses, interpretation of results and conclusions with a review of the appropriate literature, providing all *references required and indicating the public availability of all works consulted*.

### 9.1.1 Precautionary Approach, pg 26

- The EIS will demonstrate that the Project has been examined in a careful and precautionary manner. In determining whether the Project is likely to cause significant adverse environmental effects, the proponent shall;
  - Outline and *justify the assumptions* made about the effects of all Project components and activities and the approaches to minimize these effects;
  - Identify the proposed follow-up and monitoring activities, particularly in areas *where scientific uncertainty exists in the prediction of effects*.
- In the implementation of the Project, the proponent shall consider the guiding principles set out in the Government of Canada *Framework for the Application of Precaution in Science-based Decision Making About Risk* (2003). **(Note: this publication is not referenced in the EIS references)**

### 9.2 Mitigation Measures, pg 27

- ***The proponent shall describe its environmental protection plan and its environmental management system, through which it will deliver the plan.*** This section of the EIS describes how potentially adverse environmental effects would be minimized and managed over time.
- As well, the proponent shall describe its commitments, policies and arrangements directed at promoting beneficial or mitigating adverse socio-economic effects. ***The proponent shall discuss the mechanisms it would use to require its contractors and sub-contractors to comply with these commitments and policies and with auditing and enforcement programs.***
- The EIS shall specify the actions to be employed during implementation of the Project including all project components (construction, operation, maintenance, decommissioning, reclamation or other undertaking related to the project) to eliminate or reduce the significance of adverse effects. ***This should include monitoring activities that will be undertaken to evaluate the effectiveness of mitigation and the need for management response (adaptive management).***
- The EIS shall provide an analysis of the likely efficacy of the proposed technically and economically feasible mitigation measures, drawing where relevant on experience gained from employing the measures on other similar projects. The reasons for determining whether the mitigation measure reduces the significance of an adverse environmental effect shall be made explicit.
- Pursuant to subsection 79(1) of the Species at Risk Act (SARA), ***RAs must notify the appropriate federal Minister if any listed wildlife species, its***

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***critical habitat or the residences of individuals of that species may be adversely impacted by the Project.***

- ***Pursuant to subsection 79(2) of the SARA, RAs must also ensure that measures are taken to avoid or lessen those effects and to monitor them.*** These measures must be taken in a way that is consistent with any applicable recovery strategy and action plans.

#### **9.4 Determination of the Significance of Residual Effects, pg 28**

- The EIS must identify the *criteria used to assign significance ratings* to predicted adverse environmental effects.
- The EIS must contain a *detailed analysis of the significance of the predicted potential residual adverse environmental effects.*
- It must contain clear and sufficient information to enable the Agency, technical and regulatory agencies, Aboriginal groups and the public to *understand and review the proponent's judgment of the significance of the environmental effects.*
- The proponent must *define the terms used* to describe the level of significance.
- In assessing significance against these criteria, the EIS must where possible, employ relevant regulatory documents, environmental standards, guidelines, or objectives such as prescribed maximum levels of emissions or discharges of specific hazardous agents into the environment or maximum acceptable levels of specific hazardous agents in the environment.

#### **9.5 Effects of the Environment on the Project, pg 29**

- The EIS must predict how local conditions and natural hazards, such as *severe and/or extreme weather conditions* and external events (e.g., flooding, ice jams, rock slides, landslides, fire, outflow conditions and seismic events) could adversely affect the Project and how this in turn could result in impacts to the environment.
- *Longer-term effects of climate change must also be discussed up to the projected post-closure phase of the Project.* This discussion should include a description of climate data used.
- The sensitivity of the Project to *long-term climate variability* and effects must be identified and discussed.



**9.7 Capacity of Renewable Resources, pg 30**

- The EIS must describe the effects of the Project on the capacity of renewable resources to meet the needs of the present and those of the future.
- The EIS must identify those *resources likely to be significantly affected* by the Project, and describe how the Project could affect their sustainable use.

**9.8 Cumulative Environmental Effects, pg 30**

- The proponent shall identify and assess the cumulative environmental effects of the Project. Cumulative environmental effects are defined as environmental effects of a project, when *considered in combination with the environmental effects of other past, present and foreseeable future projects or activities*.
- The proponent shall discuss the *data and methodology* to be used in the *scoping phase of the cumulative environmental effects assessment*,
- The proponent shall provide a map showing all past, present and future projects it has considered to be included in the cumulative environmental effects assessment.
- The EIS must describe the analysis of cumulative effects on identified VECs over the *life of the Project*, including the *incremental contribution of all identified past, current and proposed projects and activities*, in addition to the of the Project. The EIS must include different forms of the cumulative environmental effects (e.g synergistic, additive, induced) and *identify impact pathways and trends*.