

Friday, March 16, 2012

Minister Gord MacKintosh
Manitoba Conservation and Water Stewardship
Room 330
Manitoba Legislative Building
Winnipeg, Manitoba

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Minister MacKintosh and Ms Braun,

INTRODUCTION:

Manitoba Wildlands is providing comments on the proposed Bipole III Transmission Project (Public Registry #5433.00) Environmental Impact Statement (EIS).

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 potentially the Canadian Environmental Assessment Agency (CEAA) should a federal review begin.

Manitoba Wildlands provided comments in 2010 on the Scoping Document for the Bipole III Transmission Project. **We have attached our original scoping Bi Pole III document comments**, along with an alphabetized list of the recommendations we provided. Throughout this document we refer back to these alphabetized recommendations.

Our efforts and comments are provided in the public interest, to increase certainty, quality of assessment, consultation standards, technical and scientific content for the Environmental Impact Statement (EIS). Manitoba Wildlands efforts are intended to inform, strengthen, and support the project review, effects assessment, and licensing process for the proposed hydroelectric transmission project.

We take these steps because major public works projects impacting significant areas of Manitoba's lands and waters, that also spend or borrow significant amounts of public funds must have the very highest quality of planning, access to information, environmental effects 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 licensing and EA standards.

ACCESS TO INFORMATION:

Wuskwatim Standards Need to be Met

Manitoba Wildlands participated in all stages of public review of the then proposed Wuskwatim Generation Station and Transmission projects. In a recent article published in *The Drum*, I, Gaile Whelan Enns, Director of Manitoba Wildlands, outlined nineteen precedents established by the reviews and proceedings of the Wuskwatim Projects. The article is titled: ‘Learning from Wuskwatim: Important Precedents.’

These precedents acknowledged affected communities, and showed that Manitobans were being listened to. We feel these nineteen precedents should, at minimum, be satisfied during reviews and proceedings concerning Bipole III, and all other upcoming proposed Manitoba Hydro projects, reviews, and proceedings.

- 1) **The Clean Environment Commission (CEC) asked Manitobans, and affected communities what environmental standards were needed for Wuskwatim.** The recommendations from CEC public meetings were included in the requirements for Manitoba Hydro regarding Wuskwatim – both transmission and generation stations.
- 2) **The Wuskwatim generation station is low head,** low impact for flooding, and based on decisions by Nisichawayasihk Cree Nation.
- 3) **A schedule was issued in 2002 by regulators, and updated regularly,** to let all parties know what would happen during reviews and when; where the province’s Environment Act proceedings started and ended, where the Clean Environment Commission (CEC) hearings process started and ended.
- 4) **An email list serv was put in place** so that all parties to the Clean Environment Commission process had access to documents, each other, and received updates at every step. (It should be noted this list serv was turned off when the hearings started, which means an improvement in electronic document access will be needed for the next CEC proceedings.) (See: Manitoba Wildlands Bipole III Scoping Document Recommendation B)
- 5) **Pre hearing conferences were held by the CEC** with all parties, including both funded participants, and any other hearing participant who wished to attend. These started 8 months before the hearings, and assisted in planning, preparation, and technical steps.
- 6) **The Manitoba government decided that Manitoba Hydro would provide \$1,000,000** participant funding so affected communities, non profit organizations, and environmental organizations would be able to participate in the CEC proceedings. Each of the upcoming Hydro reviews/hearings/licensing processes should have at least this amount of funding – with applications, decisions, and funds administered independent of the CEC.

- 7) **Manitoba Hydro held thorough open houses in Winnipeg** about the Wuskwatim projects, including question and answer sessions, displays of materials, and attendance by engineers, consultants, and experts who worked for Manitoba Hydro on the projects.
- 8) **With hearings held in The Pas, Thompson and Winnipeg the CEC Wuskwatim hearings** were well attended. Over 9 weeks of hearings the CEC hearings room was occupied by at least 50% Aboriginal people. Evenings the room was often over 75% Aboriginal people attending.
- 9) **When the CEC hearings room was over full a second viewing area** was set up at the Radisson in Winnipeg, with sound and close circuit television provided. Students, elders, community members from North Flood Agreement First Nations were able to sit in.
- 10) **Manitoba Wildlands set up an information centre** in the hotel where hearings were held, so media could contact presenters and expert witnesses, elders could rest, and public participants could meet and talk.
- 11) **A web site was also set up** to post evidence, reports, motions, transcripts and reports from the utility, and regulators. Those are still posted on Energy Manitoba today, in a Wuskwatim archives page.
- 12) **A wide range of expert witnesses participated** at little or no cost to Manitobans, including on topics ranging from wind energy, alternatives to the generation station itself, effects of transmission corridors on woodland caribou, migratory birds and a range of other species. The economic factors need for and alternatives to the projects were combined in the same proceeding.
- 13) **The CEC made sure public registry information** about previous generation stations and transmission projects in Manitoba was available to participants for research purposes.
- 14) **Manitoba Hydro made sure both paper and digital versions of its Environmental Impact Statements were available** to any participant, funded or not. Requests for information were handled quickly, in good faith. Requests for extra maps, CDs when needed, etc. were respected and responded to.
- 15) **Manitoba Conservation made sure Manitoba Hydro filed a supplemental filing**, after review of the Wuskwatim EIS. This means deficiencies and gaps in the EIS were answered and filed by the utility. The supplemental filing was also reviewed, with public comments.
- 16) **The CEC held important motions hearings** when significant issues about the project areas, and Manitoba Hydro's failure to disclose information needed resolution before the hearings.

- 17) **The CEC made sure First Nation panelists participated** on the panel for its hearings, and honoured requests from Elders during the hearings.
- 18) **The CEC made sure that transcripts** from each day's hearing sessions were widely available the next day.
- 19) **The CEC issued a report** (which took some time to be released by the Manitoba government) with a solid, wide ranging set of recommendations about both Wuskwatim projects, and any future Hydro projects – including environmental standards for new generation stations, hearings, and outstanding legacy issues regarding the Churchill River Diversion.

We have attached a copy of the Drum article, our Bipole III Scoping Document Comments, and an alphabetized summary list of the recommendations contained in our Bipole III Scoping Document Comments.

Paper Essential - Access to EIS Materials

We feel providing paper copies of the EIS is essential for real review. Manitoba Wildlands was one of the lucky few who received a paper copy of the four volume EIS. We found this immensely helpful because of the large nature of the EIS, including at least two hundred map. It is much easier to flip through the paper version than to comb through the several dozen pdf files, which comprise the digital version of the EIS. In fact we relied on both our paper and digital copies making access to both paper and digital copies the best for thorough review.

We understand the desire to minimize paper usage, but online posting is not effective because it transfers costs and responsibilities to citizens, and communities. The entire digital EIS is 1.74 gigabytes (GB). For many northern and rural residents dial-up Internet is the only option, and downloading 1.74 GB of pdfs with a dial-up connection is a daunting and time-consuming task. Additionally, because we largely relied on the paper version of the EIS, and the technical reports were not printed so we only recently became aware of their inclusion in the digital EIS. This limited our ability to review these technical reports

It should be noted that no LIST of maps was provided with the EIS. There are also NO large whole transmission system maps provided. The scale on the segmented smaller maps is problematic, especially in the two southern map segments.

It should be noted that there is no full table of contents for the Bi Pole III EIS.

Without a full table of contents or a guide to the location of materials unnecessary time is used locating materials. For those unfamiliar with a large EIS filing these deficiencies are a barrier.

Providing Adequate Web Memory for Manitoba Conservation EALB

Without prejudice to our previous comments on the need for paper copies being made available to the public, we also support Manitoba Conservation Environmental Assessment and Licensing Branch (EALB) being given adequate web storage to host the large documents that typically accompany a Class Three environmental review, such as the EIS filed for Bipole III. It will

become fairly complicated when the EALB web page holds comments, but not the materials being commented on. The expected supplemental EIS filing for Bi Pole III will cause further complication.

Ultimately public access to respond to the EIS is best facilitated by ease of access to both paper and digital collections of an EIS. Moreover digital copies should be unlocked to enable the ability to copy sections and search for words throughout the document (this was a problem in the first filing of the Keeyask Scoping Document).

EALB staff must have difficulties in obtaining enough website space to host all licensing EIS. The Bi Pole III EIS is only posted on the Manitoba Hydro web site. In an age when memory has become quite affordable it is simply unacceptable for the Government of Manitoba to nickel and dime their licensing branch in this way, thereby impacting the quality and relevance of EIS comments – while affecting the ability of citizens to access information.

Printed Copies, Sets of CDs, or USBs at Public Registries

It is not clear that public registry locations, particularly those in rural or northern regions, have the capacity to provide a printed copy of the EIS, or even a CD/USB version. Or copies of the technical reports CDs. We have requested CD copies of other EIS documents from the main public registry located at 123 Main Street, Winnipeg. It is unclear that other public registries have this capacity. It would be useful if additional printed and/or digital copies were provided to each and every public registry in Manitoba so that the public could borrow and/or buy printed and/or digital copies.

It should be noted that NO additional public registry locations were added to the system despite these being put in place for other licensing reviews.

Difficulties Locating Additional Bipole III EIS Information Filed

We were only able to locate additional information filed February 2012 in support of the Bipole III EIS on March 14, 2012 (a mere two-days before public comments closed). Hydro Senior Environmental Assessment Officer Pat McGarry made sure we knew otherwise we would be completely unaware that additional information had been filed.

It should be noted that no notice of these additional EIS materials were posted in February or since.

We subscribe to the weekly updates of material placed in the *Environment Act* public registry but no notice of the filing of this additional information appeared. Moreover the additional information was hidden on the Manitoba Hydro website. It was only by happenstance that one of our researchers clicked on a link on the Manitoba Hydro website which stated: “We also have separate pages that contain [downloadable files \(large file sizes\) of the EIS, technical reports, and GIS data.](#)” This is insufficient notice about Bi Pole III materials that are under a regulatory review.

There is no indication anywhere on the Manitoba Conservation Environmental Assessment and Licensing Branch web pages, nor on the Manitoba Hydro page that hosts the Bipole III EIS, that additional information is available. It is therefore likely that the affected communities and the public at large is unaware that additional information was filed. Given our late discovery of this information we are unable to review this information before the March 16, 2012 deadline.

This situation is a deficiency in the review process itself.

Technical Advisory Committee/Government Branch Review Comments Not In Public Registry

The Technical Advisory Committee (TAC) comments on the Bipole III scoping document are available, but we have not been able to obtain and review the TAC and Government Branch Review Comments for the Bipole III EIS. It would be helpful if TAC and government branch comments on the EIS were posted online before the end of the March 16th, 2012 public review period.

This situation is a further deficiency in access to information during a review period. We would request that EALB notify all parties of a review process for the TAC and government branch/department comments to be reviewed.

Review Periods Over the Holiday Season – Other Problems

The 90-day review period occurred simultaneously with the holiday season. Many Government and community offices, and public registry locations were not open for up to three weeks during this period. This also created confusion about when the 90 day review period truly began. We recommend Manitoba Conservation implement a policy that avoids licensing reviews over the Christmas and New Years holiday period, when most government offices, First Nation Band offices, and public registries are closed.

Our recent letter to Minister MacKintosh regarding difficulties with the Bi Pole III review process is attached. In short there is confusion inside Manitoba Conservation as to when the review process starts, and which branch of government has this responsibility under the Act. Clearly the EALB starts a review once a set of steps has been taking, including public notification. This means that review of the Bi Pole III EIS started around December 17 or 18, 2011. Then the holidays occurred. Patronizing correspondence to affected communities about how this was going to be a 30 day review period shows at best ignorance of the process, and at worst self serving rhetoric.

There has not in fact been a 90-day review period for this Environment Act proposal.

Combined with the above problems is the error in the EIS itself, and the gap in access to the corrected materials. All of the above are deficiencies in the EIS review process. Both the proponent and Manitoba Conservation share responsibility.

Manitoba Wildlands Review of the Public Registry

In November 2010 Manitoba Wildlands produced a review of the Manitoba *Environment Act* Public Registry (please find a copy of this letter attached). In our review we indicated numerous ways public access to information could be improved. We know that some of our recommendations have

been implemented, but many have not. We would therefore urge the Government to provide EALB staff with the resources required to improve the public registry system, especially in light of the set of Manitoba Hydro reviews and proceedings coming up.

Improvement for Supplemental Filing

As a supplemental filing for Bipole III EIS is clearly required, we feel that access to information must improve for review of any supplemental filings required for the Bipole III EIS. The ease of access to information must continue as the Clean Environment Commission hearings on Bipole III move forward.

Need For A Clear Schedule and Process Outline

In the past environmental reviews, especially for Class 3 developments, were included an outline which laid out the steps in the review process and a schedule for when these next steps and proceedings would occur. Manitoba Hydro has indicated they would like to start building Bipole III by the end of 2012. But at the same time CEC Chairman Terry Sargent indicated that such a schedule may be too ambitious (see Bruce Owen (Dec. 3, 2011), "Bipole public hearings may start next summer" Winnipeg Free Press). It would benefit the public and the proponent to have the process and timeline clearly established up front. Additionally outlining the process in simple laymen's terms will make it easier for those who are new to Manitoba's environmental review process to participate.

Bipole III EIS Mistake Impacts EIS Review Period

Manitoba Hydro accidentally included specific location information for some rare and/or endangered plant and reptile species in the first filing of the Bipole III EIS in December 2011, according to their correspondence. They then updated the EIS in January 2012 and requested all recipients of the December 2011 EIS send their copies back in exchange for the updated EIS. This time gap simply served to limit access to information even more. We have heard from some of our contacts they are still waiting to receive the updated January 2012 EIS after mailing the requested EIS materials back to Manitoba Hydro. Clearly this limits their ability to perform any form of adequate review.

We would recommend that EALB ask the proponent for a listing of who they provided materials to with details as to when those materials were replaced. An assessment, based on standards of fairness and reasonableness, should be conducted given the number of affected communities, and the interruption in the review under the Environment Act due to this error in the EIS materials.

In the future this kind of problem could be avoided if Manitoba Conservation EALB, TAC and other government departments took 30 days to review Environment Act Proposals and EIS documents before making them public. In that way mistakes can be caught and corrected before the documents are publicly disseminated. Any significant deficiencies would also be caught, with additional EIS materials added to the EIS before public review.

This approach would also make it easier for the public to review TAC/government department comments to be filed before the end of the public review period, making those comments public and available during the review period.

OFFICIAL INFORMATION / DATA GATHERING / TECHNICAL INFORMATION

Reliance on Desktop Studies

The Bipole III EIS acknowledges (section 4.2.3.1) that during the Site Selection and Environmental Assessment (SSEA) phase ““Due to the spatial scope of the Project Study Area... the majority of research ...was done by remote sensing or “desktop” studies (maps, literature studies, etc.).”

The Bipole III EIS goes on to state: “Three primary sources of information” were used following the final route selection:

- Existing published literature and unpublished information (biophysical and socio-economic) collected and synthesized during the study area characterization phase of the process;
- Information provided through Project-specific research activities, including field studies conducted to address known or expected gaps in the data. In some cases, additional research and monitoring activity will follow Project approval and securing of rights-of-way (e.g., detailed field reconnaissance and identification of site-specific avoidance or mitigation measures as part of the subsequent EnvPPs prepared for the Project); and
- ATK and local knowledge provided by residents, resource harvesters and other users, and by members of First Nations and representatives from other potentially affected communities (see section 4.2.7).

Although limited field studies were done, it is also clear that considerable reliance was placed on desktop studies, existing data, literature reviews, and in some cases aerial and google earth imagery.

To provide some examples from the Bipole III EIS:

- Soils and Terrain data relied largely on existing data with only ‘aerial reconnaissance and select ground truthing’ field studies done (see pg. 4-13);
- “No field activities were conducted” on groundwater (see pg. 4-14).
- Greenhouse gas emissions (GHGs) were determined using a desktop life cycle analysis (LCA) relying on several questionable assumptions (which we shall discuss further below).
- “Fish habitat quality was assessed for each water course within the Local Study Area using aerial photographs, aerial video, Google Earth imagery, existing published and unpublished information, and field studies (see pg. 4-15).
- Vegetation and other terrestrial components were largely examined in a Geographical Information System (GIS) using Land Cover Classification Enhanced for Bipole (LCCEB), Forest Resource Inventory (FRI), and Manitoba Conservation Centre Data (MCDC). Some botanical studies were conducted, particularly in areas with a high potential for species of concern (see pg. 4-15).
- “Particularly attention was given to boreal woodland caribou due their status and sensitivity to resource development,” through radio collaring of wolves and caribou, *inter alia*.

However, assessment of the mammal community composition still appears to be highly dependent on pre-existing data (see pg. 4-16).

- The highest level of field sampling for birds occurred in the Project Footprint (within the Right of Way) and Local Study Area (3 mile band along the transmission line route). Owl surveys, raptor migration surveys, colonial waterbird surveys, water staging reconnaissance surveys, and breeding bird surveys were conducted but still there is a heavy reliance on desktop studies (see pp. 4-17&4-18)
- “Effects of the Project on amphibians and reptiles were assessed on the basis of information obtained from published literature, government online databases, field studies, and habitat models (see pp. 4-18).”
- Amphibian and reptile field studies were only really conducted for the identified northern prairie skink and garter snake hibernacula habitat (see pg. 4-19).

Certainly advances in aerial imagery, particularly satellite imaging, have made it easier to perform wildlife studies from an office, but this will never replace the quality of the observation derived from *in-situ* field work.

This is a significant **deficiency** in the EIS. If one billion dollars of public money is going to be spent for this transmission system then it is time for Manitoba Conservation to direct the utility to do real fieldwork during the field season that is about to start. The risk of large variances in conclusions from limited data, with few seasonal observations, and little on the ground biophysical fieldwork makes much of what is provided here regarding species deficient.

Did Manitoba Hydro access the forest sample sites, and the data for those sites over time in relation to the three corridor options, and then specific to the preferred corridor?

Did Manitoba Hydro access data which Tolko, and mining companies hold regarding the project area, study area, corridor options, and preferred corridor?

Migratory birds are essentially absent from the EIS – Manitoba Hydro needs to respond to this **deficiency** in the supplemental filing.

Problems With Desktop Data

One of the problems with utilizing desktop data is that it relies upon the frequency and quality of previous studies. The proponent therefore has no way of controlling the study methodology used and the observations taken. Moreover when collating data from multiple sources it is important to recognize that not all data sets are created equally, nor are they always comparable with one another. Significant variance in results can occur.

The fact of the matter is that much of Manitoba, particularly the northern two-thirds of the province, have only had limited field studies performed. Relying on sparse data could result in erroneously drawing the conclusion that no species of concern will be impacted, when in fact the truth may be that the species are there and they have never been recorded. It is also a concern that conclusions in the EIS could be taken as if there is extensive data available.

In our March 31, 2010 comments on the Bipole III Scoping Document we noted (pg. 20):

“We would caution the proponent regarding other species to avoid the pitfall shown in recent project EIS under our Environment Act, where limited data sets that do not provide adequate species information for assessment are used to:

- Indicate there are few of a species present
- Indicate that there are no significant risks or impacts to the species

Manitoba Hydro holds or has access to considerable data about species in the project area, corridor options. But more will be needed to be able to fulfill biophysical and species information for the EIS. It will also be important to make sure reports, and analysis, are provided with the EIS, rather than interpretations of non disclosed reports.”

In many ways the Bipole III EIS is an opportunity for us to improve the quality of the wildlife data we hold in Manitoba, but this will require field studies, and transparency on the results of these field studies by the proponent.

It should also be added that Manitoba Wildlands has not had the resources to review the technical reports for Bi Pole III EIS. We anticipate making such a review part of a Manitoba Wildlands application for participant funding for the CEC hearings. We reserve the right to provide further clarifications and/or updates when we have adequate resources to review the technical reports. At that time, depending on what is included in the supplemental filing, we will do more analysis on these conclusions.

Pembina Institute GHG Emissions Life Cycle Analysis (LCA)

We were able to conduct an initial review of the Pembina Institute Greenhouse Gas (GHG) Emissions Life Cycle Analysis Technical Report.

After an initial review of the document we consider this GHG LCA insufficient to meet recommendation T (outlined in our Bipole III Scoping Document comments) that the Bipole III transmission project be a showcase for how Manitoba Hydro and Manitoba Conservation will verify carbons stocks and report emissions. We also do not think this analysis meets the requirements outlined by Manitoba Auditor General’s audit of Manitoba’s climate change policies and programs. The EALB needs to ask the proponent whether this is only estimates, and projections on a narrow definition of climate change impacts.

In total the transmission line right-of-away will disturb over 9,000 ha of forestland, with 3,000 ha of this permanent disturbance. It should be noted that this is only analysis of GHGs due to land change. There is not sufficient information about a carbon inventory before land change and the corridor occur.

It appears the Pembina Institute has only quantified the 3000 ha of permanent disturbance in it's GHG Emissions LCA. It is not clear why Pembina did not include the GHG implication of the full

9,000 ha of land use changes. Nor is there any analysis about GHGs during the construction of Bi Pole III. Nonetheless, on a 3000 ha basis the permanent land use change associated with this disturbance is at least the second largest GHG contributor over the project life cycle, and possibly the worst. Base estimates put the GHG contribution of land clearing and land change at 303,395 tonnes of carbon dioxide equivalent emissions (tCO₂eq) over the life of the project; while higher estimates more than double the GHG contribution to 660,768.00 tCO₂eq over the life of the project.

Pembina Institute Limitations

As the Pembina Institute notes in the sensitivity analysis at pg. 21:

“Calculations in this report are from the Canadian Forest Service’s “An Ecosystem Carbon Database for Canadian Forests.” Further refinement would require measured carbon content values along the current transmission corridor. ... **Carbon contents can vary significantly by region.** For example, the IPCC notes a range of 12.3 to 131 tonnes dry matter/ha² for coniferous forests in Eurasia. ... When using the high range of carbon contents land use change emissions become the single largest source of emissions and increase overall life cycle emissions by 39%. **This is a significant change to the results. Manitoba Hydro could reduce the uncertainty of the land-use-change emissions by using carbon content values specific to the right-of-way of the transmission line (emphasis added).**”

It is not clear why the Pembina Institute used only one source, rather than comparing the federal data with information from Manitoba's Forest Resource Inventory. Further analysis would answer questions as to the scale of the data in the federal government source used versus improved scale from other sources. Certainly the commissioned study should have at least compared analysis from a second source.

Being a desktop study the Pembina GHG LCA is heavily reliant on the assumptions made. The assumptions can be found at pg. 35-36.

“Pembina used the following overarching assumptions to guide calculations. These assumptions are followed by details on the carbon contents used for each forest type cleared.

- Forest land is converted to grassland/shrub land. Total forested area disturbed is 3,253 ha.
- Other land types (grassland, agricultural land, shrub land etc...) remain unchanged except for the area directly beneath the tower. The total land area directly beneath the transmission towers is 16.62 ha.
- Wetlands remain undisturbed along the length of the right-of-way.
- CO₂ is released at the time of clearing because all biomass is combusted.
- There is no significant decay.
- There is no change in the intensity of land use. That is the carbon content of soils is unchanged after clearing.
- There are no new road right-of-ways. Access will be along existing road structure or the transmission line right-of-way.
- The carbon content of all forest types being cleared are based on Manitoba specific carbon contents.

Table 3: Additional detail on Land use change calculations

Forest Type	Carbon Content (tonnes C/ha)
Coniferous	31.4
Broadleaf	55.1
Mixed	69
Grassland/Shrub	15.3

[Source: Canadian Forest Service, cited in Pembina GHG LCA Technical Report (pg. 36)]

Certainly all studies make some assumptions but many of the assumptions made in the Pembina GHG LCA, and in the EIS in general, are overly optimistic. It is unclear whether Manitoba Hydro included in its commission to the Pembina Institute using and communicating the baseline information prior to construction of the corridor. This of course would be best practice with regard to any GHG emissions assessment. References to the Right of Way only repeat through these sections of the EIS. This means we have a variety of **deficiencies** with respect to species that will require more analysis by our organization. Hopefully some of these deficiencies will be solved in the supplemental filing. But the width of the ROW only disappeared as a credible basis for species analysis during the Wuskwatim proceedings.

Any Wetlands?

One of the most surprising assumptions in the EIS is that not a single wetland, peat, bog, fen, or muskeg area is disturbed by building or operation over the entire length of 1,384km corridor, including by access in and out of the new corridor or deleterious run off into waterways.. Given our previous comments about the lack of *in-situ* studies (i.e. no ground water field studies were performed, fish habitat studies only performed via aerial photography and google maps) the onus should be placed on the proponent to demonstrate that this statement about wetlands is in fact correct. (We shall be returning to this point when discussing the potential for federal triggers under the Canadian *Fisheries Act*.)

There is a significant **set of deficiencies** in the EIS with respect to wetlands.

As discussed in Chapter 6, the bedrock geology of “[t]he northern portion of the Project Study Area [is] characterized primarily by wetland and forested land-uses,” (see pg. 6-3).

In the description of the various ecozones (see pg 6-5 to 6-9) it is clear there exists: permafrost, peat lands of varying depths, vaneer bogs, flat bogs, horizontal fens, and wetlands. Disturbance to these result in much higher GHG emissions from land use changes than disturbances to forested lands. Disturbance to any of the range of wetlands would release significant GHGs. Effects to a range of species, including moose, from loss of wetlands is ignored in the EIS.

It is therefore problematic to assume that no wetlands, bogs, fens, or peat lands are disturbed by the extremely long Bi Pole III transmission corridor.

Can the proponent or Manitoba Conservation provide evidence to back these claims up? This is deficiency (wetlands) affects several aspects of the EIS.

WUSKWATIM CLEAN ENVIRONMENT COMMISSION (CEC) REPORT

In our March 31, 2010 comments on Bipole III Scoping Document (pg. 22) we highlighted the primary recommendation from the CEC Wuskwatim Projects report on environmental assessment:

“7.8 The practice of environmental assessment in Manitoba be enhanced by requiring higher standards of performance. In this regard, the Government of Manitoba should:

- enact environmental assessment legislation,
- provide guidance for proponents, consultants and practitioners,
- establish protocols for best professional practice that includes cumulative-effects assessment.

The process should include use of traditional scientific knowledge, selection of appropriate Valued Environmental Components (VECs), establishment of baseline conditions, and establishment of thresholds in the conduct of environmental assessments. The protocols should reduce uncertainty, enhance effectiveness and improve predictability of future environmental assessments.”

Given that these recommendations have not been acted on, it is essential that any **deficiencies** in this EIS be solved before CEC hearings begin. A supplemental filing is needed.

Despite the 2005 CEC recommendations Manitoba is still one of the few jurisdictions in Canada without environmental assessment legislation or regulations. This led us to make Recommendation Y in our 2010 comments on the Bipole III Scoping Document. We would direct you to look at that recommendation about the need for Manitoba Conservation to perform an internal assessment regarding their lack of environmental assessment legislation in advance of Environment Act and CEC hearings for Bipole III.

Maps

See the comment above. There is no listing of the maps – which dramatically increases time spent identifying and reviewing the maps provided. The lack of large map sheets that show at one time, the entire corridor with respect to VECs or other factors is a significant deficiency in the EIS

products. We believe this is the first time a Class Three Development EIS has been filed under Manitoba's Environment Act without full size map sheets.

The standards which Wuskwatim EIS materials and maps set are missing in action here.

An example exercise was comparing the three options for corridor in the turn back towards the east side of Winnipeg to the converter location. The bottom or south segment map is lacking place names, and is at such a wide scale that even those who living in the region, and know the Red River Valley well would have difficulty comparing in order to see where the preferred corridor is located.

STANDARDS AND BEST PRACTICES: HYDRO & MANITOBA CONSERVATION:

In our March 31, 2010 comments on the Bipole III Scoping Document we identified sets of standards in regards to social responsibility and environmental protection, which we suggested Manitoba Hydro adopt. As a public utility their responsibilities to all Manitobans demand the highest standard possible for effects assessment, access to information, and open, accessible reviews and public hearings. It appears that there is a **deficiency** in the EIS because the public utility has not indicated to the public whether/ which of these standards they support, or use when preparing a significant EIS.

ISO Standards

According to the EIS: "Manitoba Hydro has voluntarily developed and implemented an Environmental Management System (EMS) and registered the system to the ISO (International Organization for Standardization) 14001 EMS standard (pg. 1-5)."

It would also appear that the Pembina Institute Bipole III Greenhouse Gas Life Cycle Assessment Technical Report utilized ISO 14040 standards.

However, it appears Manitoba Hydro has not implemented the ISO 2600 on Social Responsibility as outlined in our 2010 Bipole III Scoping Document Recommendation L (also see pg. 16 of our Scoping Document comments). As stated in our recommendation Manitoba Hydro should support and follow this standard, and failing that, an explanation should be provided as to why this standard was not adhered to.

International Hydropower Sustainability Assessment Protocol (HSAP)

Manitoba Hydro is a signatory and partner to the International Hydropower Association's (IHA's) Hydropower Sustainability Assessment Protocol (HSAP). Yet the EIS contains no reference to HSAP. This is a **deficiency**.

HSAP sets out four assessment tools for reviewing a proposed hydropower project at different stages of development (includes transmission projects):

- 1) Early stages
- 2) Preparation (construction)
- 3) Implementation

4) Operation

Based on the protocol hydropower projects are given a rank from 1-5 (with 5 being best) in terms of sustainability.

Aboriginal Cultural Heritage – EIS and HSAP

Preparatory tool in HSAP “P-17 Cultural Heritage” is a noteworthy section, which, “...addresses cultural heritage, with specific reference to physical cultural resources at risk of damage or loss by the hydropower project and associated infrastructure impacts (e.g. new roads, transmission lines). The intent is to identify physical cultural resources; their importance is understood, and measures are in place regarding those identified to be of high importance (see Hydropower Sustainability Assessment Protocol pg. 86).”

We assume that this tool in HSAP would be relevant in Manitoba’s north with respect to Aboriginal cultural resources. It would appear from our initial review of the EIS that a Rank of 2 would be appropriate in relation to the contents of the EIS. (i.e. ‘most relevant element of basic good practice have been undertaken, but there remains significant gaps’). Certainly we are not seeing an indication in the EIS of which other standards the utility has applied to Aboriginal heritage resources.

The following statements in the EIS and supporting technical documents provide support for this rank (i.e. they highlight efforts at good practice made, but also highlight the significant gaps which remain): (Comments follow EIS statements.)

- “The results of the [Aboriginal Traditional Knowledge (ATK)] study suggest that effects of the Bipole III transmission Project **on presently known ATK** may cause subtle changes to culture because of changes to cultural landscapes remove mnemonic cues associated with memory mapping. **This runs the risk of disrupting the continuity of cultural expression and thought (emphasis added)** (see: ATK Technical Report pg. 91).”
- This demonstrates that at least the proponent undertook an ATK study, but due to insufficient information about risks of cultural disruption significant gaps remain. It should be noted that more thorough review of the technical reports regarding ATK will be conducted when Manitoba Wildlands has the resources needed, and such analysis will be included in our participant funding application for the Bi Pole III hearings. It is unclear what literature reviews, and desk research the proponent undertook with respect to ATK and the project area.
- “**In the last 60 years, the First Nations and Aboriginal people** living in the regions roughly corresponding to the Split Lake Resource Management Area (RMA) and the Fox Lake RMA **have experienced significant, adverse disruptions in their traditional ways of life as a consequence of a number of factors including, importantly, the development of major hydro-electric generating and transmission facilities by Manitoba Hydro (emphasis added)** (see EIS 9.3.3.1 at pg. 9-23).”

- This clearly states that there have been past significant, adverse environmental effects on ‘cultural heritage’ from Hydro projects in the project area (and study area) – all of which included transmission components. On a precautionary basis then, the proponent needs to verify that such adverse environmental effects on ‘cultural heritage’ will not occur with the Bi Pole III project – anywhere in the preferred corridor, study area, project area, or in adjacent traditional lands.

The EIS is **deficient** in this area, and assurances with respect to the First Nations most impacted by previous hydro projects does not provide sufficient assurances regarding risks to the ‘cultural heritage’ and traditional lands of the rest of the 26 or more First Nations affected by Bi Pole III.

Manitoba Wildlands requires resources to review the archeological, cultural, and ATK technical reports in further detail. Doing a more thorough analysis will be a part of a Manitoba Wildlands application for participant funding for the Bi Pole III CEC hearings. When we undertake this kind of review regarding the culture and heritage of Aboriginal peoples affected by a project we use Aboriginal experts for the analysis.

Given that Manitoba Hydro seems to ignore the HSAP throughout the EIS, we would like a clear indication from Manitoba Hydro if they intend to assess the Bipole III project in accordance with Hydropower Sustainability Assessment Protocol .

Principles of Environmental Impact Assessment Best Practice

Manitoba Wildlands encourages Manitoba Conservation and 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). In our 2010 comments on the Bipole III Scoping Document we asked if Manitoba Conservation agrees with these principles. And, whether Manitoba Hydro would apply these principles to Bipole III. We have still not received an answer to these questions.

FEDERAL RESPONSIBILITIES – CEAA AND FEDERAL LAW

The Manitoba Conservation June 2010 Scoping document for Bipole III states:

"It is anticipated that Manitoba Conservation will coordinate a cooperative environmental assessment process with the Canadian Environmental Assessment Agency (CEAA) in accordance with the “Canada-Manitoba Agreement on Environmental Assessment Cooperation”. The cooperative process will ensure provincial-federal coordination and compliance with respective legislated mandates under The Environment Act and the Canadian Environmental Assessment Act." (pg. 3)

Yet the EIS for Bipole III now states:

"In the case of Bipole III, Manitoba Hydro is of the opinion that an environmental assessment will not be required pursuant to federal legislation." (pg. 1-11)

Woodland Caribou

In fact the Bipole III EIS frankly acknowledges that the project will have an impact on woodland caribou (listed by both Manitoba Endangered Species Act, and Canada Species at Risk Act, stating:

"Boreal woodland caribou (listed at Medium Risk in two ranges and Low Risk in a third range) will be negatively affected by the Bi Pole III HVdc transmission line. A number of core winter use and summer calving and calf-rearing areas in Wobowden range are being traversed... the potential of long term residual impacts are not certain and will require ongoing monitoring and adaptive management..." (pg. 8-128).

NOTE: 7 herds in total may be impacted by the BP3 project (habitat, calving, wintering, food sources, etc. We are highlighting those ignored in the EIS 1) Naosop (overlay with Reed Lake herd and heavily impacted by fire in 2010); 2) WimWap - on other side of Wabowden herd location; 3 & 4) Wheadon & Harding Lake herds further away but still in project area. Wabowden, Reed Lake, Bog herds are acknowledged as being impacted in the EIS

The EIS is **deficient** in that all woodland caribou herds that utilize the project area, or study area should be included in the EIS. The range area for these woodland caribou herds are as relevant as the proponent's areas. That is the question is not just how the caribou affect the project, study, corridor areas. It should be noted that the preferred corridor appears to actually put more woodland caribou at risk than other options for the corridor.

Given that woodland caribou are listed as threatened under the federal Species At Risk Act (SARA) (as well as the Manitoba Endangered Species Act (MESA), a trigger to a review under CEAA may exist.

In Manitoba Wildlands March 31, 2010 comments on the Bipole III Scoping Document we cited Section 68 of SARA, which states:

"No person shall destroy any part of the critical habitat of a listed endangered or a listed threatened species that is in a province or territory and that is not part of federal lands."

It should be noted that the EIS seems to ignore the fact the preferred corridor will impact at least 4 woodland caribou herds. The utility selected the preferred option for this transmission corridor – which the EIS admits impacting woodland caribou including calving areas. Also one of the **deficiencies** in the EIS scope artificially decreases the stated impact on these woodland caribou herds. A three kilometer buffer on each side of the transmission corridor in no way reflects the current scientific OR traditional knowledge regarding woodland caribou range areas, wintering or

calving areas. We do not see information about risk to the primary winter food source for woodland caribou: lichen.

Manitoba Hydro needs to solve the **deficiencies** in the EIS about woodland caribou. There is considerable information in the records for the Wuskwatim projects review regarding woodland caribou. And since those reviews and hearings the scientific work across woodland caribou range areas in Canada has increased dramatically. We expect to see additional information in the supplemental filing.

It should be noted that Manitoba Wildlands has limited resources at this time regarding species at risk from this project, and that we intend to do further analysis. In particular the proponent seems to have lost its way with respect to ungulates, size of range, and the impact area around a transmission corridor. Further analysis will be needed but we are concerned about the information about tundra caribou and the various sub species in the northern sections of Bi Pole III.

Federal Responsibilities

The EIS does claim that the federal *Navigable Waters Act* and *Fisheries Act* will not be triggered by construction and operation of the Bipole III project, stating: “Manitoba Hydro is confident that there will be no interference to navigation on any of the rivers and streams which will be crossed by transmission lines... [and that] provisions for treatment of ... waste will result in neither the loss of any fish or fish habitat nor the release of any substance into a fish bearing river or stream that is deleterious to fish.”

Despite the proponent’s confidence the federal Department of Fisheries and Oceans (DFO) and Transport Canada are still reviewing these assumptions of the proponent.

IMPACTS FROM CONVERTER STATIONS:

These potential impacts require more complete treatment than the EIS currently contains:

- insulator oil leakage
- coke leachate from ground
- leak of gases from sealed insulators, etc.
- risk of fire at converter stations
- EMF risks – cancer, communication troubles

IMPACTS FROM TRANSMISSION CORRIDOR AND HARDWARE

These potential environment effects require more complete treatment than the EIS currently contains, especially given the reliance on literature reviews and desk studies.

- loss of wetlands & peatlands carbon
- loss of forest cover/forest fragmentation
- bird deaths
- risk of artesian saline aquifers contaminating fresh ground water sources

WILDLIFE HABITAT DISRUPTION (see Chapter 8 *inter alia*)

MAMMALS

These potential environment effects require more complete treatment than the EIS currently contains, especially given the reliance on literature reviews and desk studies.

- Woodland Caribou (Wabowden, Reed Lake, Bog) and 4 other herds
- Barren ground caribou
- Moose
- Elk
- American marten
- Beaver
- Wolverine

BIRDS

These potential environment effects require more complete treatment than the EIS currently contains, especially given the reliance on literature reviews and desk studies.

- Waterfowl (Mallard, Sandhill Crane, Yellow Rail)
- Colonial Waterbird VECs (great Blue Heron and Least Bittern)
- Birds of Prey (Bald Eagle, Ferruginous Hawk, Burrowing and Short-eared Owl)
- Upland Game Bird VECs (Sharp-tailed Grouse and Ruffed Grouse)
- Pileated Woodpecker and Red-headed Woodpecker
- Songbirds and Other Bird VECs (Common Nighthawk, Whip-poor-will, Olive-sided Flycatcher, Loggerhead Shrike, Sprauge's Pipit, Golden-winged Warbler, Canada Warbler and Rust Blackbird)

AMPHIBIANS AND REPTILES

These potential environment effects require more complete treatment than the EIS currently contains, especially given the reliance on literature reviews and desk studies.

- Northern Leopard Frog (MESA)
- Wood Frog
- Red-sided garter snake
- Northern prairie Skink
- Plains Spadefoot

It should be noted that there are risks, variances and **deficiencies** resulting from the approach taken by Manitoba Hydro to providing species information (flora and fauna) for the project. The woodland caribou information and taiga/tundra caribou comments above are just a beginning on our concerns regarding species. In particular recent announcements by Manitoba Conservation that suddenly the moose population has stabilized in the Duck Mountains and Porcupine Hills means that independent analysis for moose is needed. We assume that estimates and projections are not good enough for decision making on this project, especially as they may have a variance as high as

30 or 40 %. Manitoba Hydro needs to **solve these deficiencies** by including the actual field work they will conduct this year in their supplemental filing – and report on more complete species data and analysis before licensing hearings start.

PUBLIC POLICY FOR PUBLIC UTILITY

This EIS is **deficient** in regards to the range of public policy relevant to this project which the utility needs to fulfil. Class Three Development EIS guidelines in Manitoba need to return to requirements for the proponent, and assurances from the proponent that public policy, programs, and regulations or law in Manitoba will be fulfilled for this project.

It is unclear why the Sustainable Development Act and its principles and guidelines are missing in this EIS. We expect the supplemental filing for Bi Pole III EIS to correct this **deficiency**.

CLIMATE CHANGE

The GHGs from land change report from the Pembina Institute is a beginning *only* in terms of the contents needed in this EIS regarding climate change mitigation measures. A **deficiency** exists here, one we identify for further review. It is long overdue for the utility to use baseline data, carbon inventory data and fully identify all the emissions from the start of a project, through all stages of the project.

It should be noted that a range of other sets of data are needed for a climate change analysis for this project.

SOCIAL LICENSE TO OPERATE

As a public utility Manitoba Hydro needs to be more mindful of its social license to operate – and while there were workshops and open houses held during planning stages for this transmission project – communication since a year ago regarding the project has been absent.

Manitobans deserve clearer information, and respect for their questions, especially when they would pay for a project via debt. In particular the confusion and controversy about location for this transmission corridor *AND* the reason for building Bi Pole III stretch the loyalty, and credulity of Manitobans. The EIS **does not address sufficiently** either of these issues. We expect the supplemental filing materials to investigate and explain whether the need for Bi Pole III is energy reliability for Manitoba homes, businesses, and public sector *OR/AND* for export revenues.

Manitoba Hydro has a social license to operate investment in the next steps for Bi Pole III reviews, and hearings to be respectful, open, with information and services to Manitobans being accessible. This is especially true for the 26 First Nation communities and numerous municipalities and towns affected by the project. In the last year Manitoba Wildlands believes the project lost its way, and lost some of its social license to operate, and build Bi Pole III. At this time the Bi Pole III undertaking is in terms of the needs of Manitobans – who will be paying for the project.

To date there is no information about the Needs for and Alternatives to analysis for this project. This is a **deficiency** that must be corrected. We assume a public process.

CONSULTATIONS

Our staff have been informed that First Nation & Aboriginal consultations for Bi Pole III have *NOT* started as yet. Given the stated policy of our provincial government – that First Nations approval is needed for this project – it is a clear **deficiency** on the part of the Crown that these consultations have not started. It is unclear how the assumed timelines for this Project can be met without progress on First Nation consultations. At least twenty-six First Nations and several Metis communities plus Northern Affairs communities deserve the respect upon which Aboriginal consultations are based.

Also Northern Flood Agreement (modern day treaty in northern Manitoba) First Nations are entitled to consultations with respect to any new Hydro project. We wonder if those consultations have started.

IN CLOSING - This set of EIS review comments will be accompanied by a set of attachments which we have referenced in this document, or which we are providing to assist others in their due diligence. We anticipate that various deficiencies will be addressed in the supplemental filing.

Submitted by



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See Attachment List and materials