

Infrastructure and Transportation

Highway Planning and Design Branch Environmental Services Section 1420 – 215 Garry St., Winnipeg, MB R3C 3P3 T (204) 945-2369 F (204) 945-0593

December 7, 2012

Tracey Braun, M. Sc. Director, Environmental Approvals Branch Manitoba Conservation and Water Stewardship 123 Main St., Suite 160, Winnipeg, MB R3C 1A5

RE: Manitoba Hydro – Dorsey to Portage South Transmission Line Client File No 5611.00

Dear Ms. Braun:

MIT has reviewed The Environment Act Proposal noted above and we would like to offer the following comments:

- A permit from MIT is required for any construction above or below ground level within 38.1 m (125 ft) from the edge of any Provincial Road's right of way or 76.2 m (250 ft) from the edge of any Provincial Trunk Highway's right-of-way.
- Based on the indicated alignment, MIT would like to remind the proponent that it is always the Department's preference to have utility crossings under roadways. The Department recognizes this is not always possible and, in such cases, the preference is that these crossings be accomplished perpendicular to the roadway alignment and that angular crossings be avoided wherever possible.

For clarification and further information, the proponent may contact the following with regards to the above comments:

Wes Turk Regional Planning Technologist Wes.Turk@gov.mb.ca (204) 239-3292

Thank you very much for providing us the opportunity to review the proposal.

Sincerely,

Ryan Coulter, M. Sc., P. Eng. Manager of Environmental Services



From: Wiens, Jonathan (CON) Sent: December-07-12 11:27 AM To: Dagdick, Elise (CON) Subject: 5611.00

Please accept the following comment from the Wildlife Branch, in regards to environmental assessment (Client File# 5611):

- After reviewing the information provided, Wildlife Branch identifies that the proposed route A1-A2 (also referred to as the Preferred Route), appears to have the least impact on wildlife and wildlife habitat.
- Wildlife Branch is also encouraged to read that the construction work will occur over the winter months, during the time when that activity will have the least affect on wildlife.

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Jonathan Wiens, MSc Habitat Specialist Manitoba Conservation Box 24 - 200 Saulteaux Crescent Winnipeg, Manitoba, R3J 3W3 Phone: (204) 945-7764 Mobile: (204) 945-3077 Email: jonathan.wiens@gov.mb.ca



DATE: December 3, 2012

TO: Elise Dagdick Environmental Officer Manitoba Conservation Suite 160-123 Main Street Winnipeg MB

FROM:

PHONE NO:

Gordon Hill Impact Assessment Archaeologist Historic Resources Branch Main Floor 213 Notre Dame Avenue Winnipeg MB R3B 1N3 (204) 945-7730

SUBJECT: ENVIRONMENT ACT PROPOSAL

YOUR FILE: 5611.00

HRB FILE: AAS-12-5213

DORSEY TO PORTAGE SOUTH TRANSMISSION LINE MANITOBA HYDRO

I have reviewed the above-noted application for an Environment Act License. The Historic Resources Branch has concerns with regard to this project's potential to impact heritage resources.

A Heritage Resource Impact Assessment was completed for this project (Appendix 11.5) It was recommended that further archaeological investigation will be required once tower locations have been identified near stream crossings. This recommendation should be included as a condition of the Environment Act Licence.

If you have any questions or comments, please contact me at 204-945-7730.

C. Gordon Hill

From:	Hawryliuk, Yvonne (CON)
Sent:	November-30-12 10:13 AM
То:	Dagdick, Elise (CON)
Subject:	FW: Mb Hydro Review

Here is a comment for you.

Yvonne Hawryliuk, M.Sc. Regional Supervisor - Central Region - South Environment Officer Conservation and Water Stewardship - Environmental Compliance and Enforcement Ste. 160 123 Main Street Winnipeg MB R3C 1A5 Phone: (204) 945-5305 Fax: (204) 948-2338 email: Yvonne.Hawryliuk@gov.mb.ca

24 hr Environmental Emergency Response Line 1-855-944-4888

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From: Bueckert, Curt (CON) Sent: November-27-12 3:58 PM To: Reichelt, Raymond (CON); Hawryliuk, Yvonne (CON) Subject: RE: Mb Hydro Review

I have reviewed this document. The transmission line may affect livestock operations however it does not seem to effect operations ability to continue reasonably normal manure handling procedures. The transmission line may run through some fields that are used in MMP.

Curt Bueckert

From: Reichelt, Raymond (CON) Sent: November-27-12 3:02 PM To: Hawryliuk, Yvonne (CON) Cc: Bueckert, Curt (CON) Subject: RE: Mb Hydro Review

Hi Yvonne:

I have reviewed this submission and have no comments other than to say that my potential concerns were addressed in the submission.

Raymond Reichelt (204) 239-3608

From: Hawryliuk, Yvonne (CON) Sent: November-16-12 4:44 PM

From:Molod, Rommel (CON)Sent:November-30-12 8:11 AMTo:Dagdick, Elise (CON)Cc:Gilbertson, Mike (CON)Subject:Manitoba Hydro - Dorsey to Portage South Transmission Line (5611.00)

Elise,

The Air Quality Section have reviewed the above proposal and have no comment. Potential air quality concerns associated with the project are adequately addressed in the submission. Thank you for the opportunity to review.

Rommel

Rommel Molod Air Quality Section Environmental Programs and Strategies Branch Manitoba Conservation and Water Stewardship 1007 Century Street

Winnipeg MB R3H 0W4 T (204) 945-7047 C (204) 451-5081 F (204) 948-2420

From: Sent: To: Subject: Elliott, Jessica (CON) November-27-12 10:15 AM Dagdick, Elise (CON) Manitoba Hydro - Dorsey to Portage South Transmission Line (client file 5611)

Parks and Natural Areas Branch has reviewed the proposal filed pursuant to the Environment Act for the Manitoba Hydro - Dorsey to Portage South Transmission Line (client file 5611). The Branch has no comments to offer.

Jessica

Jessica Elliott, M.E.Des. Head, Park System Planning and Ecology Parks and Natural Areas Branch Conservation and Water Stewardship Box 53, 200 Saulteaux Cres Winnipeg MB R3J 3W3

phone: 204-945-4365 cell: 204-805-4084 fax: 204-945-0012

email: Jessica.Elliott@gov.mb.ca



Before printing, think about the environment

Avant d'imprimer, pensez à l'environnement

From:Matthews, Rob (MWS)Sent:November-12-12 4:34 PMTo:Dagdick, Elise (CON)Subject:Manitoba Hydro - Dorsey to Portage South Transmission Line

No concerns from my group, the Water Use Licensing Section.

From:Stibbard, James (MWS)Sent:November-30-12 12:06 PMTo:Dagdick, Elise (CON)Subject:Re: 5611.00 Manitoba Hydro, dorsey to Portage South Transmission Line, EAP

Ms. Dagdick,

I reviewed the above noted EAP for any concerns relating to public or semi-public water systems or health or safety of drinking water. I noted the following:

- Section 5.4.2. "Infrastructure" of the Report notes items such as highways, railways, gas pipelines etc. in the study area. This area also contains a number of buried domestic water supply pipelines belonging to regional water suppliers such as the Cartier Regional Water Coop. Before finalizing the locations of transmission towers, Manitoba Hydro will have to confirm the tower and line locations will not interfere with the regional water pipelines.
- The EAP notes the transmission line will cross the La Salle River upstream from the Sanford Regional Water Treatment Plant. The LaSalle River is the raw wter source for this water treatment plant. As such, contact information for the Sanford Regional Water Treatment Plant should be included in the emergency and contingency plans for the project with instructions that, should any spill of hazardous material into the LaSalle River occur during or after construction of the project, the plant operators at the Sanford Regional Water Treatment Plant should be contacte4d immediately.

Beyond these points, the Office of Drinking Water sees no other potential cause for concern respecting public water quality or safety with the proposed development.

I trust this is satisfactory, but if you have an questions, please call. Regards,

James Stibbard P. Eng.

Approvals Engineer Office of Drinking Water 1007 Century Street Winnipeg MB R3H 0W4 phone: (204) 945-5949 fax: (204) 945-1365 email: James.Stibbard@gov.mb.ca website: www.manitoba.ca/drinkingwater

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From: Sent: To: Cc: Subject: Janusz, Laureen R (MWS) December-03-12 2:18 PM Dagdick, Elise (CON) Klein, Geoff (MWS); Long, Jeff (MWS) EAP 5611 MB Hydro Dorsey to Portage South Transmission Line due Dec 3

Hi Elise,

Fisheries Branch has reviewed this proposal to construct a new 66 km, 230-kilovolt alternating current transmission line. The line will originate from the Dorsey Converter Station, located 10 km northwest of Winnipeg and terminate at the Portage South Station, located 12.5 km southeast of Portage La Prairie. Under the preferred route, the proposed transmission line will cross the Assiniboine River, tributaries to the Assiniboine River, the La Salle River and tributaries.

An overview of the Assiniboine and La Salle watersheds was provided including fish species, DFO habitat classification, SARA, riparian vegetation and water quality. Regarding some of the information in the report, we provide the following comments:

- It was noted in the report that tributaries to the Assiniboine (i.e. First, Second and Fourth) were considered
 indirect habitat meaning "waterbody does not provide spawning, rearing, feeding, overwintering, or migration
 habitat but may contribute to downstream habitat through water flow, nutrient transport or drift (invertebrate
 food items)". An Aquatic Technical Report "Water Level and Temperature Regime Characteristics of Four
 Intermittent Prairie Streams in South-Central Manitoba: Implications for Northern Pike Habitat Evaluation
 Procedures" by Duncan Wain in 2001 noted the presence of northern pike in First Creek and northern pike,
 white sucker, channel catfish, central mudminnow, freshwater drum and bigmouth buffalo in Second Creek
 indicating that at least in those years when adequate flow exists these intermittent streams provide spawning,
 nursery and foraging habitat for indicator and forage fish species.
- Under the SARA information it is noted that no species are listed under the Manitoba Endangered Species Act. Earlier this year Mapleleaf Mussel was listed as endangered under the Manitoba Endangered Species Act.

The EA identified potential direct project effects to habitat as temporary or permanent habitat loss at crossings installed for construction and operation; reduction in water quality due to erosion and sedimentation at watercourse crossings and blockage or reduction in fish passage at watercourse crossings. Indirect effects to habitat was the disruption or destruction of riparian habitat along watercourses and in wetlands.

Although transmission line construction and operation are typically less disruptive to the aquatic environment and the proponent has identified mitigation measures; a table identifying all proposed watercourse crossings linked to a figure illustrating the crossings as well as specific watercourse crossing habitat/riparian details and construction details (tower distance from watercourse, construction crossing requirements – none, ice bridge, proposed window of construction works, mitigation measures, etc.) consolidated in one area would have facilitated the review of this proposal.

The proposal states that towers will be sited as far from waterways as possible and environmentally sensitive areas like the Assiniboine River riparian area will be cleared by hand and according to the Stream Crossing Guidelines for the Protection of Fish and Fish Habitat. We would expect hand clearing to occur anywhere there is an established riparian area and where feasible, 15 m of riparian area be retained from the high water mark adjacent to 1st and 2nd order creeks and 30 m be retained from the high water mark adjacent to 3rd order and higher streams and rivers.

Specifically for the Assiniboine River crossing the proponent's have decided to double circuit the existing D12P Assiniboine River. Although the existing D12 P towers on either side of the river will need to be replaced with double

circuit self supporting lattice steel suspension towers it is our understanding that this will reduce or eliminate the need for any additional ROW and ultimately lessen the alteration of the riparian area.

We did not notice any indication of incorporating erosion and sediment control measures if required; monitoring water quality through TSS measurements or inspecting and monitoring watercourse crossings. Fisheries Branch would like to see a summary of the temporary and transmission crossing inspections, where there were issues, how they were addressed, timeframe and follow up inspections. Ideally it would be best if regional fisheries staff were notified of an issue when it occurs.

Finally there was no information on practices to mitigate against the transfer of foreign biota. We would want to ensure that any equipment that is to be used in or near water and is moved between watershed basins, is visually inspected and cleaned to minimize the potential to transfer foreign aquatic biota.

Thanks Elise.

Laureen Janusz Fisheries Science and Fish Culture Section Fisheries Branch, Manitoba Conservation and Water Stewardship Box 20, 200 Saulteaux Crescent Winnipeg, MB R3J 3W3

Phone: 204.945.7789 Cell: 204.793.1154 Fax: 204.948-2308 Email: <u>Laureen.Janusz@gov.mb.ca</u>

From:	Flynn,Heather [CEAA] [Heather.Flynn@ceaa-acee.gc.ca]
	Dagdick, Elise (CON): EASouthPNR [Wpa]: pnrea-rpnee@tc.ac.ca
Cc:	Farmer,Kristina [CEAA]
Subject:	5396 Dorsey to Portage South Transmission Line - Manitoba Hydro (MC File 5611.00)

Good afternoon,

This email is to confirm receipt of the Environment Act Proposal for the Dorsey to Portage South Transmission Line – Manitoba Hydro (MC File 5611.00) and to facilitate sharing of the project information with federal authorities.

As you may be aware, in July 2012, the *Canadian Environmental Assessment Act*, 2012 (CEAA 2012) came into force. CEAA 2012 focuses federal reviews on those project proposals that have a greater potential for significant adverse environmental effects in areas of federal jurisdiction. The *Regulations Designating Physical Activities* identify the physical activities which, if carried out individually or in combination, constitute a "designated project" that is subject to the requirements of CEAA 2012.

Based on the information provided by Manitoba Conservation and Water Stewardship, the project referred to above does not appear to meet the definition of a "designated project" under CEAA 2012.

Please note that the proponent is responsible for confirming its federal regulatory responsibilities in developing its project, including confirming whether its proposal is described on the *Regulations Designating Physical Activities* under CEAA 2012. Please advise the proponent to review the regulations (<u>http://laws-lois.justice.gc.ca/eng/regulations/SOR-2012-147/index.html</u>) and contact the Canadian Environmental Assessment Agency if its proposal meets the definition of a designated project.

As the Agency will only be involved in the review of designated projects, no formal federal coordination exercise has been undertaken for this file. However, the Agency has copied Environment Canada, and Transport Canada on this correspondence for information purposes. Any federal authorities that would like to see the project proposal should contact Elise Dagdick directly (204-619-0709, <u>elise.dagdick@gov.mb.ca</u>).

Thank you for your effort to ensure coordination and close communication between provincial and federal levels of government. If you require any further clarification on the requirements of CEAA 2012, please feel free to contact me.

Heather

Heather Flynn, MSc.

Environmental Assessment Officer, Prairie Region | Agente d'évaluation environnmentale, Région des Prairies Canadian Environmental Assessment Agency | Agence canadienne d'évaluation environnementale Suite 101, 167 Lombard Ave Winnipeg MB R3B 0T6 | 167, avenue Lombard, bureau 101 Winnipeg MB R3B 0T6 heather.flynn@ceaa-acee.gc.ca Telephone | Téléphone 204-984-3233 Facsimile | Télécopieur 204-983-7174 Government of Canada | Gouvernement du Canada



Lequis pfirst Nation

P.O. Box 10 PEGUIS RESERVE, MANITOBA ROC 3JO Telephone: (204) 645-2359 Toll Free: 1-866-645-2359 Fax: (204) 645-2360 Website: www. peguisfirstnation.ca

Thursday, December 20th, 2012

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

Ms. Tracy Braun, Director, Environmental Assessment and Licensing Branch Manitoba Conservation 123 Main St. Suite 160 Winnipeg, Manitoba R3C 1A5

Minister MacKintosh and Ms Braun:

Re: Dorsey to Portage Transmission Environment Act Project – Public Registry #5611.00

Dear Minister MacKintosh & Director Braun,

We request this letter be filed in the public registry file for the Manitoba Hydro Dorsey to Portage Transmission Line Project. We note that EALB staff are aware our response to the Environment Survey Report for the project, and we expect our comments and this letter to be part of the official record for the proposal under the Environment Act. This would include posting on line and in the paper public registry file.

Peguis First Nation considers its nation, rights and its citizens to be impacted by the Dorsey to Portage Transmission Line Project. Most project components; Dorsey Converter Station upgrades, Portage South Transformer Station upgrades, and the Transmission line, fall within the Peguis Treaty Land Entitlement (TLE) notice area. The ESR states that MB Hydro attempted to contact Peguis First Nation, in order to participate in their community engagement activities. Manitoba Hydro combines consultation language with community engagement language in its Dorsey to Portage transmission project information: Consultation activities and the obligation to consult First Nations regarding this project, of course, are the responsibility of the provincial government.

There has been no initiation by the Manitoba government for consultation with Peguis First Nation regarding this Manitoba Hydro project. Information about the Peguis First Nation TLE notice area and TLE agreement is public, including it is provided in the Manitoba Geological Survey Map Gallery and database. As a public utility Manitoba Hydro is expected to be knowledgeable and responsive to First Nation rights and land acquisition agreements. As a signatory to our TLE Agreement, Manitoba, including Manitoba Conservation and Water Stewardship, need to ensure that government staff are up to

date about these matters. In particular when existing Manitoba Hydro infrastructure fall within our Nation's TLE notice area, such as the Dorsey Converter Station, it becomes obvious that any project that involves the Dorsey Station affects, also involves our First Nation.

Since August 2012 our efforts to identify the government staff persons in Manitoba Conservation and Water Stewardship, and in Aboriginal and Northern Affairs, or other departments who are responsible for community consultations for this and other transmission projects repeatedly failed. We request that staff immediately communicate with myself as Councilor, so we can move the consultation process forward.

Our review comments pertain to consultation assumptions; failure to incorporate traditional ecological knowledge (TEK), clarity and availability of ESR information and various environmental concerns, including those which may affect aboriginal rights. Most specifically Peguis First Nation is commenting on this Manitoba Hydro project because it, and existing infrastructure being upgraded, lie in our TLE notice area and our traditional territory. It is also the position of Peguis First Nation that environmental effects from a project also affect our aboriginal rights, and complicate our lands acquisitions.

1.) Consultation with First Nation Peoples

Consultation with affected First Nations should begin prior to initiating the environmental review process and filing ESR, EIS or EA statements under the Environment Act. The Crown has the responsibility for consulting with First Nations in a meaningful way, and communicating the outcome, concerns and issues raised by First Nations to the proponent and government, before making decisions. For the Dorsey to Portage Transmission Line Project (#5611.00), public 'consultation' was carried out by the proponent; Manitoba Hydro. The ESR frequently refers to consultation with landowners, First Nations and the public. This kind of reference by Manitoba Hydro has had to be corrected in the past. The Crown needs to also ensure that all proponents; Crown Corporations or otherwise, understand that it is the Crown's responsibility to conduct First Nation consultation, so they are mindful of their wording, pertaining to such activities within public documents. We would caution that having discussions with other First Nations who may indicate they are not affected in no way means that another first nation, such as Peguis First Nation, is therefore also not affected by this project.

Throughout the document no reference is made to Peguis First Nation traditional lands, Treaty One or the Peguis Treaty Land Entitlement (TLE) notice area. The Dorsey Converter Station is located within the Peguis First Nation TLE notice area, and the entire project falls within our traditional lands. Therefore any activity licensed or permitted within the Peguis TLE notice area or traditional lands, without consultation with Peguis First Nation, may well violate our Aboriginal and Treaty rights. Failure by Manitoba Hydro to recognize Peguis First Nation traditional lands, Treaty One and our TLE notice area is a recurrent theme. The Dorsey Converter Station, transmission line to the Portage South Station, The Station and Bipole I & II were built without consultation.

Since Bipole I & II and the Dorsey station were built the Constitution, Charter and laws of Canada have changed dramatically with respect to Aboriginal rights. Today if a First Nation indicates they are affected by a project then the Crown(s) are required to consult with that affected First Nation. Accommodation may also be required. It is essential also for all representatives of the Crown to understand that Aboriginal rights in Canada are not static. Through court decisions, and legal definitions, Aboriginal rights are moving forward with the rights of all Canadians.

2.) Traditional Knowledge

Peguis views incorporation of traditional ecological knowledge (TEK) to be a critical component for environmental effects assessments. Within the Wildlife, Heritage Resource Inventory Assessment (HRIA), Wildlife and Biophysical & Vegetation technical reports for this project, there is no mention of TEK or whether the information gathered during the community meetings was utilized to arrive at report conclusions. However, in the summary of the community engagement meetings, it states that local knowledge was utilized in general but it does not indicate how or source. TEK is highly relevant for assessing baseline ecological values and determining the presence of ecologically or culturally important wildlife or vegetation species. Furthermore, the identification of First Nation heritage/sacred sites requires Aboriginal Traditional Knowledge (ATK), which was not utilized when assessing the study area.

In particular, given Manitoba Hydro wishes to use the same corridor which currently includes the transmission line from Dorsey station to Portage south station – which were built and licensed with no TEK – it is now essential that steps be taken to correct the earlier omission. We note that no information regarding the existing transmission line and existing transmission project has been provided, despite the decision to use that same corridor and keep the existing transmission line.

It is evident from this ESR and the lack of First Nation community consultation by the Crown, that there is a break down in communication between the Crown, Manitoba Hydro, and affected First Nation communities. Due process must be followed in a consistent way from project to project, independent of perceived project magnitude.

Recommendations:

- 1. The Crown needs to adhere to their guiding document on Aboriginal and First Nation consultation, ensuring that the consultation process is consistent from project to project, including adequate and early notification.
- 2. Communicate to this proponent that First Nation consultation is carried out by the Crown, and to refrain from using the word consultation, when referring to First Nations.
- 3. Existing information in the hands of the Crown regarding archeological sites in the project region should be reviewed, and updated especially in relation to predictive modeling for other Archeological sites that may be Aboriginal.
- 4. All archeological field study needs to incorporate traditional ecological knowledge (TEK) and Aboriginal traditional knowledge (ATK) when surveying a study area for cultural heritage sites. Therefore the Dorsey to Portage Transmission Line study area should be reassessed for culturally relevant sites using TEK and ATK and subject to supplemental filing.
- 5. The Crown needs to establish, in conjunction with First Nations, the definition of TEK and ATK, and how these are to apply to current and future developments within the province.

3.) Double Corridor Selected & Extreme Weather Events

The preferred corridor for this upgraded station and transmission line (D83P) is the current corridor containing the D12P transmission line, with some proposed adjustments for width and type of tower at certain locations. The ESR content does not indicate any potential risks associated with the corridor selection. However, the ESR does identify benefits of using the same corridor, including that Manitoba Hydro already holds the right of way. The ESR should include analysis of any possible risks of having the new towers and transmission lines within the same narrow corridor.

The risk of extreme weather events damaging transmission and energy station infrastructure is a real threat in Manitoba. For example, according to the Bipole III Environmental Impact Survey (EIS), in June 2007 a level 5 tornado knocked out Bipole I and Bipole II lines in a dual corridor in the area of Elie Manitoba, which is 30 Km south of the Dorsey Converter Station. This further speaks to the number and severity of extreme weather events that have been taking place in the within that region of the province.

Despite these trends, the ESR makes no mention of severe weather events potentially impacting the D12P/D83P dual transmission corridor, as well as the Dorsey Converter Station. In recent Bipole III proceedings, it was acknowledged that dual lines are at greater risk for damage, given their close proximity to other infrastructure. As it relates to Bipoles, there is an informal policy within Manitoba Hydro to develop single transmission line corridors due to the potential of severe weather rendering multiple adjacent lines inoperable. Given the high risk of severe weather impacting the proposed dual Dorsey to Portage transmission lines, it begs the question of whether Manitoba Hydro thought to apply this same policy to smaller lines in high risk areas, in order to mitigate and plan for potential damage. The proponent should provide the EALB and the public with an explanation as to risks, and the thinking about having these two transmission line close together.

Recommendations:

- 1. The Dorsey station to Portage upgrades and transmission project should be assessed in relation to risks from extreme weather events given the corridor will contain both transmission lines.
- 2. Address within the ESR the potential risks of utilizing the pre-existing corridor for a dual transmission system.
- 3. Make sure technical information about the existing transmission line in the corridor is part of each section in the ESR

4.) Advice Document & TAC Comments

It is not clear whether Manitoba Hydro followed the requirements in the EALB advice or guidance document regarding building transmission projects in Manitoba including this size of project. The EALB needs to provide this guidance or advice document in the public registry file, and Manitoba Hydro's ESR must be assessed in relation to the requirements of the Manitoba government. In past EALB advice and guidance documents were made available for review in order to facilitate thorough examination of the ESR/EIS. At this time Peguis First Nation's comments on the project are incomplete because the EALB guidance or advice document is not available.

Another useful source of information to assist with the ESR review and commentary would be comments and questions raised by the Technical Advisory Committee (TAC) for this project. In past, we found the TAC comments and questions very helpful when they were made available prior to the closing of the public comment period. To date these have not been available. Peguis First Nation reserves the option to file further comments when the TAC comments are made available.

Recommendations:

- 1. Make the EALB advice and guide document pertaining to class 2 transmission line projects available to the public for use during review.
- 2. Make sure that the EALB advice and guidance document has been fulfilled by the proponent.
- 3. Make the TAC comments available to the public prior to closing of the public review period.

4. Make the scoping document and ESR guidelines for this project available before filing of the ESR.

5.) Availability and Clarity of Project Information

As stated within the advertisements, the Manitoba Hydro ESR was accessible for public review at certain public registries November 3rd, with a closing date for public comment on December 3rd. Timely review of the ESR was difficult as it was not made available online until mid November, only after requests, including on behalf of Peguis First Nation, for it to be posted.

The general wording used by Manitoba Hydro with reference to naming of documents in this Environment Act process is problematic. During the public engagement meetings, the environmental assessment document for this project is called an Environment Impact Survey (EIS), however the report available online is called an Environment Survey Report (ESR). Furthermore, the initial pages of all supporting documents posted online do not show source of the document, and it is not clear what the documents are or who wrote them. For First Nations and members of the public not familiar with such documents, it is imperative that clear and consistent labeling be used in order to minimize confusion.

Certain information provided within the open house documents is also inconsistent with regards to what is present within the ESR itself. Vague content areas include the following;

- Not clear exactly how much land in total is required to expand the corridor
- Uses three different lengths for the corridor throughout the open house document; 70 km, 66 km and 64 km.
- States that the alternative route selection and environmental assessment would be completed by April 2012 and the ESR would be submitted May 2012. This is a very short period to legitimately include public input into the ESR in any sort of meaningful fashion.
- As stated previously, the ESR is referred to as an EIS
- There is no mention of follow-up with the public, land owners or First Nations following ESR submission and regulatory approval of the project.
- The ESR discusses a monitoring and follow-up program with the public land owners and First Nations, but this is not clear and there is no information about this program..
- ESR contents regarding information at the project open houses is provided as text documents and not cross referenced to the actual open house materials in the technical reports, and attachments.
- Table of contents is insufficient and not clear, especially about technical reports attached.

Recommendations:

- 1. Ensure that all EIS/ESR documents are available online and at public registries by the date that the comment period opens.
- 2. Use consistent and clear labeling for all documents based on EALB standards and direction to proponents
- 3. EALB to issue clear glossary and definitions for all materials, and documents used and filed at every stage of Class 1,2,3 projects under Manitoba Environment Act.
- 4. EALB to consider making sure that information about a project that may affect First Nations is advertised in a manner that makes sure that public notification reaches members of potentially affected First Nations.
- 5. Ensure that all material presented in the open houses is consistent with that presented within the ESR and supporting documents.

6. Cross reference between contents in the ESR and materials in the attached technical reports.

6.) Environmental Concerns

On past occasions Peguis First Nation has voiced our concern regarding the impact of electromagnetic frequencies (EMFs) from transmission and converter projects, on the health and well being of people and wildlife. Given that this project involves the parallel transmission lines, further consideration should be given to the cumulative impact of dual lines on human and animal health, as well as on sensitive electronic equipment. The information provided within the report on the issue is limited at best, and requires a thorough review by an independent third party, before we find the response satisfactory. Until that point, our members will consider the issue unresolved and a potential threat to human and animal welfare.

In addition, Manitoba Hydro recently commissioned a technical review on this matter, so making that report available for this project also is a practical step which EALB should require. Low frequency electromagnetic fields (LF-EMF) are those frequencies below 300 Hz, which constitute electrical output from transmission lines. Scientific research on the subject provides evidence in support of LF-EMFs having potential adverse affects on human health. Studies investigating the correlation between LF-EMF and cancer incidence through epidemiological investigation have drawn inconclusive results.

However, at the molecular level, the impact of LF-EMF on cellular genomic stability is more apparent and easily measured. One of the primary underlying mechanisms of cancer development is through recurrent DNA damage and accumulation of genetic mutation. Numerous studies have investigated the relationship between genomic instability and exposure to LF-EMFs, observing an increased amount of DNA damage in LF-EMF exposed cell populations compared to controls. The references for the scientific literature are provided as an attachment to this letter. In future, when Manitoba Hydro states that there are no potential adverse affects to human health due to LF-EMF exposure, we recommend that they first complete a thorough review of the scientific literature to support their claims.

Herbicide application for the purpose of clearing and maintaining ROW is another pressing matter. The ESR is not clear on the types of herbicides to be used, frequency of application or the potential impact to surrounding farms, the environment and wildlife. The ESR does state that herbicide application near river crossings will be avoided, however it doesn't factor in the potential of herbicide contaminated water run-off into water crossings, or drainage from the herbicide treated corridor to other areas.

Establishing sound environmental and wildlife baseline values is a critical component when conducting field surveys and longitudinal studies, for purposes of comparison and affects assessment for any large development. According to the technical reports (Wildlife and Vegetation), baseline values for a variety of environmental components were not established through field study and analysis of up to date information. In the wildlife technical report it states that site-specific studies were not conducted for mammals, amphibians and reptiles, indicating that observation of these animals took place while conducting the extensive bird surveys or through pre-existing database analysis. In addition, the baseline values for vegetation are severely lacking, whereby field study was not conducted and assessments were based on outdated vegetation inventories.

The vegetation technical report states; *"Plant communities of conservation concern (Table 10) were also considered; however, emphasis was not placed on identifying these communities in the field since the classification and identification of these communities has not been updated since the mid-1990s.*

Also, presence of these communities in the general Project area was based on a desktop survey and was not confirmed in the field (C. Friesen, pers. comm.). "Overall, the technical report acknowledges that information used to develop the baseline values for vegetation is out of date and that the technical data is not fully accurate, however this is not conveyed within the ESR.

It is also worth highlighting the fact that within the VEC tables (4-1 through 4-3), there is information missing pertaining to the following;

• Under the section of biological environment, there are no columns for vegetation, wetland, wildlife and at risk wildlife species occurring within the footprint area/corridor. There is only mention of those environmental parameters lying outside the project footprint/corridor, which will be impacted by the project.

The ESR references the use of an Environmental Management System (EMS), which is the process within Manitoba Hydro established to guide Environmental Protection Plans (EnvPP), which are developed for each project and employed throughout the construction and operational phases of the project by all staff. In addition there is a Site Selection and Environmental Assessment process employed by Manitoba Hydro to initially select the development area. For all processes/programs mentioned it is unclear as to whether there are a set of guiding documents/standards, and whether these are available for public review.

Recommendations:

- 1. Conduct a thorough review on the health affects related to LF-EMF exposure in humans and animals. Make that review available in the comments process for this project.
- 2. Provide information on the types of herbicides to be used, their frequency of application and information on toxicity and adverse health effects upon exposure.
- 3. Manitoba Hydro to provide information about its demonstration projects regarding new approaches to keeping transmission corridors clear as part of the filing for this project.
- 4. Make the Environmental Protection Plans available for public review.
- 5. Provide full information about Manitoba Hydro's environment management system methods, and how they arrive at environment protection plans for transmission projects to show what will be protected, monitored and mitigated for this project.

Supplemental Filing Needed

Deficiencies and inconsistencies in this ESR/ EIS filing point to a lax approach based on assumption of a license being issued. A public utility must provide the highest standard of information, public process, and accuracy in its filings for projects, while avoiding preconceived notions about environmental effects of each project.

The areas of the ESR that are most lacking and require supplemental filing include:

- 1. The ESR needs to provide a suitable adverse affects section for the selection of the ROW, factoring in the implications of severe weather events and how they may impact the functionality of the transmission lines combined in one corridor.
- 2. Pertaining to vegetative species, a more in-depth field study should be conducted so that the information provided within the ESR is relevant and that baseline values are accurate.
- 3. Pertaining to the wildlife survey, mammals, amphibians and reptiles should be included within the field study in order to accurate baseline values of wildlife present in the study area.

- 4. Baseline information and context for the project from the initial transmission project, and initial Dorsey Station project should be available, and should be included in the effects assessment. Basically we have no cumulative effects information, and are adding to and making double use of a former transmission corridor.
- 5. Lack of consultation with our First Nation means that consultation now has to occur before any licensing decision is made. The obligation to make sure this occurs rests with the Crown.
- 6. Lack of accurate information and context regarding Peguis First Nation's TLE notice area, and traditional territory, especially given the location of Dorsey Station, means this ESR is deficient.
- 7. The ESR has no clear basis. That is none of the following are available; scoping document, ESR guidelines and guidance document for class 2 transmission projects.

Closing Comments:

Leaving out the Peguis First Nation TLE notice area when Manitoba Hydro prepared and filed the EIS for the Dorsey to Portage la Prairie transmission line is a breach of good faith and the honor of the Crown. As a public utility Manitoba Hydro is aware that our TLE notice area is in place so that Peguis First Nation can enhance economic opportunities, locate those opportunities, and enjoy economic benefits and employment from our TLE notice area. Instead we are not involved or included in the planning, assessment or economic outcomes from Manitoba Hydro projects which affect our First Nation.

These omissions by Manitoba Hydro, even after in person meetings with Manitoba Hydro personnel regarding this project, directly affect our ability to enjoy or exercise our Aboriginal rights. In particular our First Nation is engaged in TLE lands acquisition at the same time, with the result that we have incomplete information while we use resources to select lands.

Throughout each review of Manitoba Hydro projects there are a variety of consistent concerns that keep arising, due to the inability of Manitoba Hydro to properly address and rectify these issues, particularly pertaining to; First Nation consultation, Aboriginal and Treaty Rights, traditional land use, traditional ecological knowledge and the environment. Our land users and elders are asking repeat questions on these matters – and asking why the publicly owned utility cannot come up with better approaches to address these concerns. So far it appears that Manitoba Hydro wishes to keep separate its statements, and presentations on these matters in the proceedings for another transmission project. Due to failure to answer questions about this project by staff at Manitoba Hydro and EALB, a supplemental filing is required. This is especially important due to the lack of information regarding the existing transmission project being added to in the same corridor.

Yours with respect,

Mike Sutherland Councillor Peguis First Nation

Copy to: Peguis First Nation Chief & Council

Attachments:

- 1. Low Frequency Electromagnetic Frequency Literature List: *Exposure and Implications for Human Health.*
- 2. Peguis First Nation Base Map: Bipole III Corridor and Manitoba Hydro Infrastructure Whelan Enns Associates Inc.

Attachment #1

Peguis First Nation Dorsey to Portage Transmission Project Letter to Minister MacKintosh

Low Frequency Electromagnetic Frequency Literature List: Exposure and Implications for Human Health

The references listed provide a background detailing the potential adverse health implications associated with low-frequency electromagnetic frequencies (LF-EMFs) on various mammalian cell types, as it relates to genetic damage. This literature suggests that there are potentially greater health implications associated with long-term exposure to LF-EMFs, and that more research in the area of molecular biology and cancer development needs to be conducted before making any final conclusions, stating that LF-EMFs are inert and non-hazardous to human and animal welfare.

- Ahuja, Y. R., B. Vijayashree, et al. (1999). "In vitro effects of low-level, low-frequency electromagnetic fields on DNA damage in human leucocytes by comet assay." <u>Indian</u> Journal of Biochemistry and Biophysics **36**(5): 318-322.
- Hong, R., Y. Zhang, et al. (2005). "Effects of extremely low frequency electromagnetic fields on DNA of testicular cells and sperm chromatin structure in mice." <u>Zhonghua lao</u> <u>dong wei sheng zhi ye bing za zhi = Zhonghua laodong weisheng zhiyebing zazhi =</u> <u>Chinese journal of industrial hygiene and occupational diseases 23(6): 414-417.</u>
- Ivancsits, S., E. Diem, et al. (2003). "Age-related effects on induction of DNA strand breaks by intermittent exposure to electromagnetic fields." <u>Mechanisms of Ageing and</u> <u>Development</u> **124**(7): 847-850.
- Ivancsits, S., E. Diem, et al. (2002). "Induction of DNA strand breaks by intermittent exposure to extremely-low-frequency electromagnetic fields in human diploid fibroblasts." <u>Mutation Research - Genetic Toxicology and Environmental</u> <u>Mutagenesis</u> 519(1-2): 1-13.
- Ivancsits, S., A. Pilger, et al. (2005). "Cell type-specific genotoxic effects of intermittent extremely low-frequency electromagnetic fields." <u>Mutation Research - Genetic</u> <u>Toxicology and Environmental Mutagenesis</u> **583**(2): 184-188.
- Jajte, J., M. Zmyślony, et al. (2001). "Protective effect of melatonin against in vitro iron ions and 7 mT 50 Hz magnetic field-induced DNA damage in rat lymphocytes." <u>Mutation</u> <u>Research - Fundamental and Molecular Mechanisms of Mutagenesis</u> **483**(1-2): 57-64.
- Lai, H. and N. P. Singh (1997). "Melatonin and N-tert-butyl-α-phenylnitrone block 60-Hz magnetic field-induced DNA single and double strand breaks in rat brain cells." Journal of Pineal Research **22**(3): 152-162.
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- Lourencini Da Silva, R., F. Albano, et al. (2000). "The effect of electromagnetic field exposure on the formation of DNA lesions." <u>Redox Report</u> **5**(5): 299-301.

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Phillips, J. L., N. P. Singh, et al. (2009). "Electromagnetic fields and DNA damage." Pathophysiology **16**(2–3): 79-88.

- Schmitz, C., E. Keller, et al. (2004). "50-Hz magnetic field exposure influences DNA repair and mitochondrial DNA synthesis of distinct cell types in brain and kidney of adult mice." <u>Acta Neuropathologica</u> **107**(3): 257-264.
- Svedenstål, B. M., K. J. Johanson, et al. (1999). "DNA damage induced in brain cells of CBA mice exposed to magnetic fields." In Vivo **13**(6): 551-552.
- Winker, R., S. Ivancsits, et al. (2005). "Chromosomal damage in human diploid fibroblasts by intermittent exposure to extremely low-frequency electromagnetic fields." <u>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</u> 585(1-2): 43-49.
- Wolf, F. I., A. Torsello, et al. (2005). "50-Hz extremely low frequency electromagnetic fields enhance cell proliferation and DNA damage: Possible involvement of a redox mechanism." <u>Biochimica et Biophysica Acta - Molecular Cell Research</u> 1743(1-2): 120-129.
- Yokus, B., D. U. Cakir, et al. (2005). "Oxidative DNA damage in rats exposed to extremely low frequency electro magnetic fields." <u>Free Radical Research</u> **39**(3): 317-323.
- Zmyślony, M., J. Palus, et al. (2000). "DNA damage in rat lymphocytes treated in vitro with iron cations and exposed to 7 mT magnetic fields (static or 50 Hz)." <u>Mutation</u> <u>Research - Fundamental and Molecular Mechanisms of Mutagenesis</u> **453**(1): 89-96.