

P.O. Box 7950 Stn Main ● Winnipeg Manitoba Canada ● R3C 0J1 Telephone/ N° de téléphone: (204) 360-4394 ● Fax/ N° de télécopieur: (204) 360-6167 SJohnson@hydro.mb.ca

April 18, 2013

Elise Dagdick Environmental Approvals Branch Manitoba Conservation and Water Stewardship Suite 160, 123 Main Street Winnipeg, MB R3C 1A5



Dear Ms. Dagdick:

# <u>Re: 5624.00 - Lake Winnipeg East System Improvement (LWESI) Transmission</u> <u>Project</u>

This letter is in response to Darrell Ouimet's email of March 5, 2013, requesting additional information on the above project.

## **Required Additional Information**:

#### Question #1

While the proponent has indicated complying with DFO's operational statements, the crossing at O'Hanly appears to be at a bend in the river. The DFO statement on transmission lines recommends avoiding bends. Is there a reason why this crossing had to be placed at a bend? (Fisheries Branch)

#### **Response:**

Based on the above information request there are two potential concerns that could arise from construction at the bend of the river. The two concerns listed below are taken directly from DFO's operational statement for overhead crossings:

- a) Design and construct approaches so that they are perpendicular to the watercourse wherever possible to minimize loss or disturbance to riparian vegetation.
- b) Avoid building structures on meander bends, braided streams, alluvial fans, active floodplains or any other area that is inherently unstable and may result in erosion and scouring of the stream bed or overhead line structures.

Regarding point (a), the proposed is at a meander bend, however, with our standard mitigation, the potential effects in the riparian area, will be minimized. In addition, if we





P.O. Box 7950 Stn Main • Winnipeg Manitoba Canada • R3C 0J1 Telephone/ N° de téléphone: (204) 360-4394 • Fax/ N° de télécopieur: (204) 360-6167 SJohnson@hydro.mb.ca

move the crossing, the corner tower would be in the floodplain likely causing greater disturbance to riparian vegetation.

Regarding point (b), the corner tower would be just over 130 m from the edge of the water. This distance combined with applicable erosion and sedimentation mitigation measures would minimize potential soil stability and erosion issues as a result of tower foundation installation.

These concerns were discussed with Fisheries Branch and confirmed that the crossing as proposed is of no concern (see attached email from Fisheries Branch).

### **Question #2**

Please provide additional comment on the mitigation measures submitted by Wildlife Branch as it relates to moose, specifically:

- a. minimizing line of sight
- b. minimizing human access points
- c. vegetation management
- d. hydro line maintenance
- e. pre/post moose monitoring in the affected GHA 26

#### **Response**:

- a) A visual barrier of existing shrub and herbaceous understory where the ROW intersects existing roads and trails will be maintained with the exception of a minimal trail for construction purposes where required. The trail will be allowed to re-vegetate to a minimal width to allow for snowmobile and flex track access for maintenance activities.
- b) Manitoba Hydro will seek Integrated Resource Management Teams (IRMT) approval for any new access roads or trails required to develop the project. Manitoba Hydro agrees to work with IRMT in the development of decommissioning plans to mitigate continued access for roads and trails not required for operations and maintenance.
- c) The vegetation within the right-of-way (ROW) and adjacent danger trees will be managed to maintain Manitoba Hydro clearances for the safe operation of its facilities. Manitoba Hydro's vegetation management prescriptions are designed to establish shrub and understory vegetation compatible with the safe operation of its facilities. In areas of concern for line of sight, initial clearing will be selective in nature to include tree removal only except at tower locations and along the access trail. Ongoing vegetation management prescriptions will favor the





P.O. Box 7950 Stn Main • Winnipeg Manitoba Canada • R3C 0J1 Telephone/ N° de téléphone: (204) 360-4394 • Fax/ N° de télécopieur: (204) 360-6167 SJohnson@hydro.mb.ca

maintenance and establishment of shrub understory within the area of line of sight concern.

- d) Manitoba Hydro inspects its facilities on an annual basis using both ground and aerial surveys methods. Where ground surveys are required by snowmobile they will be conducted in early winter in one pass or late winter to minimize the establishment of packed trails. Manitoba Hydro requires continuous access to its facilities for maintenance and emergency repairs to ensure safe operation. Manitoba Hydro will inform IRMT of any scheduled maintenance activities and will follow mitigation measures for wildlife prescribed within the Operations and Maintenance Environmental Protection Plan. Manitoba Hydro will consult with IRMT on the development of the Operations and Maintenance Environmental Protection Plan.
- e) To evaluate moose, wolf, human and white tailed deer use of, response to, and movements associated with the new ROW, Manitoba Hydro is not considering the use of moose and wolf collars. Due to the fact that wolves are social animals, the collar does not function on average for more than a few months due to damage from teeth from other pack members. Out of 49 deployed for the Wuskwatim Transmission Project, 46 failed within the first 5 months.

The substantial harvest of wolves by resource users within GHA 26, previous Manitoba Hydro experience with high collar failure rates due to damage, and that wolf collars degrade the value of the fur are some of the contributing factors in the decision to not consider wolf collaring in the monitoring program.

Collaring of moose is an ideal tool to understand regional habitat use and calf recruitment; however it is not an efficient or effective tool for monitoring of moose use patterns or uses frequency within a small project area. Aerial and ground monitoring methods are much more efficient for gathering moose use and frequency data.

Examples of Manitoba Hydro's planned approach to monitoring of the effects of the LWESI Transmission Project on moose includes involving aboriginal communities, IRMT. local resource harvesters and other local stakeholders/committees in the monitoring program. Manitoba Hydro has had success in the use of trail cameras deployed along the ROW, pre, during and post construction to monitor use by moose, predators and humans. This type of monitoring can be done in conjunction with schools, trappers, stakeholders and other groups that would like more involvement with projects that are happening in their local areas. An aerial survey of the proposed transmission ROW will be





P.O. Box 7950 Stn Main ● Winnipeg Manitoba Canada ● R3C 0J1 Telephone/ N° de téléphone: (204) 360-4394 ● Fax/ N° de télécopieur: (204) 360-6167 SJohnson@hydro.mb.ca

conducted to find high moose use areas and cameras will be deployed within these areas. A control group of cameras will also be deployed in a similar habitat outside of the project area to measure animal activity in an area of no disturbance. All triggered events will be characterized and stored in a trail camera database for statistical and spatial analysis. Through this method we can learn about movements along ROW of predators, humans and prey species. An analysis of movement frequency, time and relation to linear features can also be developed

Manitoba Hydro will also monitor for any moose mortality sites located in proximity to the transmission ROW and investigate cause and linkages to access created by ROW (i.e predator (human or animal) use of ROW to facilitate mortality). Manitoba Hydro through its monitoring plans will also solicit wolf and moose harvest information from local resource harvester's interviews to gather any change in harvest as a result of the new transmission line ROW.

As described above, Manitoba Hydro will work with local Integrated Resource Management Teams, and their respective Branches within Manitoba Conservation and Water Stewardship. Manitoba Hydro will share monitoring program results in Annual Monitoring Reports and meetings.

Should you require any further information or have any questions regarding the Project, please contact me at 360-4394.

Sincerely,

Channin Johusm

Shannon Johnson, Manager Licensing & Environmental Assessment Department, Transmission Planning & Design Transmission