

# Bipole III

## Bipole III Transmission Project: A Major Reliability Improvement Initiative Round Four – Preliminary Preferred Route



Manitoba Hydro is pleased to be sending out this Round Four newsletter to continue dialogue with you on this important project. We have been busy since last Fall (2009) collecting and evaluating input and undertaking environmental assessment activities related to alternative routes for the Bipole III transmission project. This newsletter outlines what we have learned thus far, presents a preliminary preferred route for the transmission line, and provides background information on the project. In this final round of the environmental assessment consultation process, we are again asking for your input on the route through a series of meetings and open houses.

Bipole III is an important reliability improvement initiative for our transmission system in Manitoba. With Bipole III we will continue to provide reliable, clean, and economic energy to all Manitobans. With your input we will continue to work towards minimizing potential effects of the project on people and our environment.

We look forward to continuing discussions with you on this project.

Sincerely,

Bob Brennan, FCA  
President and CEO  
Manitoba Hydro

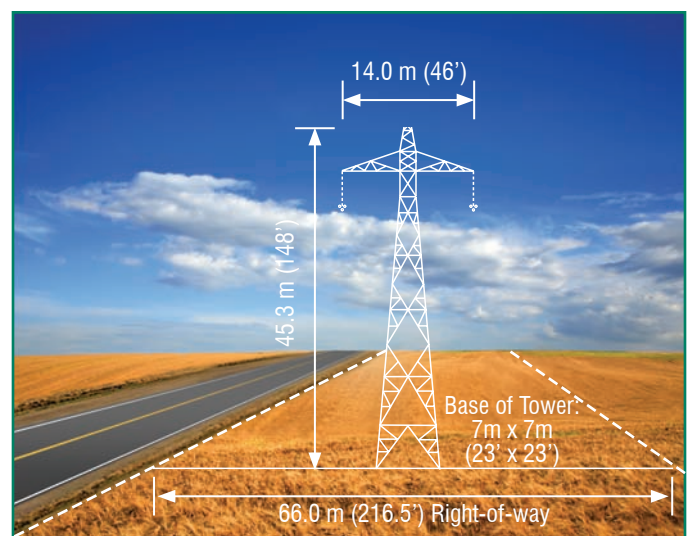
### About the Bipole III Transmission Project

The Bipole III transmission project involves construction of a new 500 kV high-voltage direct current (HVdc) transmission line to link the northern power generating complex on the Lower Nelson River with the conversion and delivery system in southern Manitoba. The project is required to improve system reliability, decrease dependency on one southern converter facility and provide additional transmission capacity for delivery of existing and proposed hydroelectric generation to southern markets.

The line will originate at a new northern converter station (Keewatinoow), located near the proposed Conawapa Generating Station site east of Gillam in northern Manitoba. It will terminate at a new converter station at the Riel site east of Winnipeg. The transmission line will be built on steel towers on a 66 meter wide right-of-way, over the 1,364 km of the preliminary preferred route.

As part of the project, collector transmission lines (230 kV high voltage alternating current (HVac)) will be required from Henday Converter Station and Long Spruce Generating Station for the new Keewatinoow Converter Station. A ground electrode facility will also be needed for the operation of each of the new converter stations.

### Typical Tower and Right-of-way



### Why is Bipole III Needed?

The Interlake transmission corridor (Bipole I and II) carries 75% of Manitoba's generating capacity in a single corridor while Dorsey Station is the only converter station in southern Manitoba. This over dependence on these facilities leaves Manitobans vulnerable to outages from severe weather, fire or sabotage events.

The Bipole III transmission project will improve system reliability by providing a new transmission line and additional conversion facilities in both northern and southern Manitoba. These system improvements will reduce the risk of simultaneous and potentially catastrophic outages by increasing the separation distance from existing facilities.



## What We Heard During Round Three

The goal for Round Three of the environmental assessment (EA) consultation process was to obtain feedback on the alternative routes.

Numerous meetings were carried out throughout the study area. Feedback provided was then incorporated into the evaluation of the alternative routes.

### ■ Eastern Routing

A frequently mentioned comment from Round Three participants was the issue of an eastern routing for Bipole III. This was noted as an important issue for many respondents. However, following an assessment of system reliability options and review by the Manitoba Hydro Electric Board and the Province, a decision was made to develop Bipole III on the west side of the Province. Fundamental to the decision was concern for the protection of a proposed UNESCO World Heritage site on the east side of Lake Winnipeg and avoiding potential negative impact on Manitoba Hydro's U.S. export revenues.

### ■ Agriculture

Many individuals raised concerns regarding the potential impact to agricultural operations, particularly due to diagonal crossings and the loss of agricultural lands. To address agricultural concerns, diagonal crossings were avoided where possible and routing opportunities along roadways and ½ mile lines were considered when determining the preliminary preferred route. Effects on irrigated land and limits on aerial application are potential concerns that Manitoba Hydro has acknowledged and will continue to address. In addition, landowners will be able to continue farming the land under the transmission line as they have prior to any towers being erected.

### ■ Health and Electric and Magnetic Fields (EMF)

A number of individuals raised concerns regarding potential health effects associated with EMF from transmission lines. In addition, there were concerns regarding potential EMF interference with GPS and other electrical devices. To address these issues, Manitoba Hydro has contracted an independent consulting firm to review these concerns. Current scientific studies and literature have shown no direct link between human health effects and EMF. For further information on this topic, alternating and direct current brochures are available on the Bipole III project website.

### ■ Property

Potential effects on property were frequently discussed at meetings in regards to land use and changes to farming practices.

Manitoba Hydro will provide a comprehensive compensation package for landowners affected by the transmission right-of-way. The compensation package will be based on:

- Acquiring easements based on the value of the land at the time of negotiations;
- The impact of tower placement on agricultural land as it relates to loss in production and changes to farming practices; and
- Construction damages during the construction phase of the project.

Landowners will have an opportunity to discuss the compensation package in more detail at scheduled landowner information centres (LICs). Potentially affected landowners will be notified directly regarding the locations and times for the LICs.

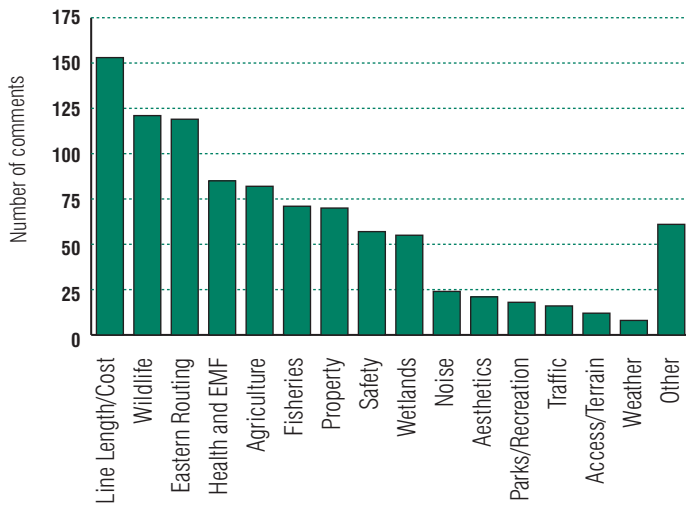
### ■ Trapping

Concerns were raised regarding the potential effects of the new transmission line on trapping. Manitoba Hydro has a Trapper Notification and Compensation Policy to address identified effects on trapping. Under the policy, transmission lines greater than 115 kV that impact Registered Traps qualify for a disturbance allowance. Manitoba Hydro will be discussing this policy with individual trappers impacted by the transmission line throughout the EA consultation process.

### ■ Employment

Employment, training and business opportunities were frequently raised topics. There was significant interest in the process of securing employment and the types of jobs that may be available for the Bipole III transmission project. Manitoba Hydro will be discussing employment, training, and business opportunities with communities once an environmental licence is in place and the project has been approved.

### Round Three Responses by Topics of Interest\*



\*The number of comments were derived from comment sheets, emails and letters submitted.

### How was the Preliminary Preferred Route Selected?

The Site Selection and Environmental Assessment (SSEA) process to select a route for the Bipole III transmission line was initiated in 2008. Round Three of the EA consultation process provided an opportunity for review and comment on the three alternative routes and a variety of sub-routes. Many comments and suggestions were received and this feedback was incorporated into the evaluation of the alternative routes to arrive at a preliminary preferred route.

A total of 83 alternative route segments were evaluated, rated and compared. Twenty-eight different criteria were used to determine the preliminary preferred route, some of which are shown below.

#### Route Selection Criteria

- ✓ Socio-economic concerns
- ✓ Agriculture
- ✓ Wildlife
- ✓ Habitat and fragmentation
- ✓ Vegetation
- ✓ Caribou
- ✓ Technical feasibility
- ✓ Aboriginal Traditional Knowledge
- ✓ Stakeholder group considerations
- ✓ Public input
- ✓ Land use patterns and recreation



Bipoles I and II Transmission Lines

### Four Rounds of Environmental Assessment Consultation

The purpose of the EA consultation process is to provide meaningful opportunities for people to participate in the review and evaluation of the project. Your input helps the study team identify specific issues and potential effects of the project, which can then be considered and assessed. Three rounds of EA consultation to date have provided useful feedback that has been integrated into the route selection process.

### Round Four EA Consultation – Goals and Commitments

The main purpose of Round Four EA consultation is to present the preliminary preferred route and to provide an opportunity for stakeholders and the public to:

- Review and comment on the preliminary preferred route;
- Identify potential concerns or effects; and
- Discuss mitigation measures to minimize or avoid potential project effects on people and the environment.

Round Four EA consultation will include stakeholder meetings and community and regional open houses. Landowner information centres (LICs) will provide an opportunity for landowners to discuss the project one-on-one with Manitoba Hydro representatives.



**Please refer to the inserted map showing the preliminary preferred route.**

## Bipole III Project Timeline

TASKS	2008	2009	2010	2011	2012	2013 - 2017
Rounds One & Two EA Consultation Develop Alternative Routes	█					
Round Three EA Consultation		█				
Preliminary Preferred Route Selection			█			
Evaluation of Preferred Route			█			
<b>Round Four EA Consultation</b>			█			
Final Preferred Route Selection				█		
Submit EIS for Regulatory Review				★		
Regulatory Review and Approval					█	
Construction					█	
In-Service Date						★

## Community Development Initiative

Manitoba Hydro has developed a Community Development Initiative (CDI). This initiative will provide an annual benefit to communities in the vicinity of the Bipole III facilities. The CDI will provide support for development projects that will benefit broad segments of the eligible communities. Further information about the CDI will be available during Round Four meetings.

## Environmental Assessment is Key

As a part of the project planning process, a comprehensive Environmental Impact Statement (EIS) will be prepared that will:

- Identify project components and characterize the environment;
- Identify potential effects the project may have on the environment and people;
- Determine ways to avoid or reduce potential adverse effects;
- Determine ways to enhance potential beneficial effects; and
- Develop follow-up and monitoring programs.

EA consultation is an important component of the process and is integral to implementing a project with minimal effects on individuals, communities and the environment.

Manitoba Hydro is also committed to incorporating Aboriginal Traditional and Local Knowledge in the EA process. This input will continue to provide important perspectives on the environmental and socio-economic implications of developing and operating the proposed project.

## Next Steps

With the preliminary preferred route identified, the Bipole III project team will continue to collect information on the route for the remainder of 2010 and into 2011. The results of these EA activities will assist in the assessment of potential effects of the project on the physical environment, terrestrial and aquatic environments, as well as heritage resources, land and resource use, and the socio-economic environment. This information will support the Environmental Impact Statement (EIS), which will be submitted in June 2011 for review and approval under the *Environment Act* (Manitoba) as well as under other federal and provincial legislation. The EIS, once submitted, will be available for public review and comment.

## We Want To Hear From You

There are a number of ways you can participate and provide your input:

- Community and regional open houses (check our website for upcoming dates and locations);
- Comment sheets available at open houses and on the project website; or
- Contact us directly.

## Contact Information

### C.B. (Carl) Johnson

Northern Community Coordinator  
Licensing & Environmental Assessment

### Patrick McGarry

Senior Environmental Assessment Officer  
Licensing & Environmental Assessment

**Address:** Manitoba Hydro, P.O. Box 7950, Station Main, Winnipeg, MB, R3C 0J1

**Toll Free:** 1-877-343-1631     **In Winnipeg:** 360-7888

**Email:** [bipole3@hydro.mb.ca](mailto:bipole3@hydro.mb.ca)