

## Bipole III Transmission Project: A Major Reliability Improvement Initiative

### Round Three – Alternative Route Selection



#### About the Bipole III Transmission Project

The Bipole III Transmission Project involves the 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 delivery system in southern Manitoba. The line is required to improve system reliability (reduce the risk of major power outages) and to 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 site located near the proposed Conawapa Station site east of Gillam in northern Manitoba, and will terminate at a new converter station at the Riel Site east of Winnipeg in the Rural Municipality of Springfield. The transmission line will be built on steel towers on an approximately 60 meter wide right-of-way.

As part of the project, collector transmission lines (230 kV) will be required from Henday Station and Long Spruce generating station for the new northern converter station. A 500 kV AC transmission line will also be required to link Dorsey and Riel Stations along an existing right-of-way in southern Manitoba. A ground electrode facility will also be needed for the operation of each of the new converter stations.

#### Why is Bipole III needed?

Approximately 75% of Manitoba's generating capacity is delivered to southern Manitoba (to Dorsey Station) in just one corridor through the Interlake, shared by the Bipoles I and II HVdc transmission lines.

The existing transmission system is vulnerable to the risk of catastrophic outages if both Bipole lines and/or the Dorsey Converter Station are damaged due to severe weather events (tornado/ice storm/wind storms), fire, or sabotage. System reliability studies have concluded that the likelihood of such events occurring, when combined with severe consequences of prolonged major outages, warrant substantial system improvements to reduce dependence on Bipole I and II and the Dorsey Station.

*Top Left: Existing Bipole I and II Transmission Lines  
Bottom Left: Forest fire adjacent to Bipole I and II transmission lines.*



## Bipole III Alternative Route Selection Process



Manitoba Hydro has initiated a Site Selection and Environmental Assessment (SSEA) process to select a route for the Bipole III transmission line. The SSEA Process involves mapping biophysical, socio-economic, technical and reliability criteria within the broad study area originally identified in Round 1. Some of the areas to be avoided by transmission line routes

included: National Parks, Ecological Reserves, Provincial Wilderness Parks, First Nation Lands, Provincial protected areas, and critical habitat for species at risk. It was also desired to keep a large separation distance from Bipoles I and II for system reliability and security reasons. Terrain suitability for construction was considered along with routing opportunities such as placing the transmission line along existing right-of-ways (roads, rail lines). Public and stakeholder input from Rounds 1 and 2 were also reviewed and considered in route selection. Computer mapping was used to assemble all the information over the entire study area. The study team then considered all the various inputs and made three initial route selections for further evaluation (see map insert). Evaluation of the alternative routes will continue this Fall leading to selection of a preferred route in early 2010 after considering all public and stakeholder responses obtained during the current round of consultation.



**Please refer to the attached map showing the alternative routes and their descriptions.**

## Four Rounds of Consultation

Public consultation is a key element of the SSEA activities and will involve four rounds of consultation before the process is complete (See graphic below). The purpose of the public consultation process is to provide meaningful opportunities for people to receive information and participate in the review and evaluation of the project. The public and stakeholder input will help identify issues and potential effects of the project that can be considered and assessed while the project is in the planning stage. Two rounds of consultation have already occurred and helped in selecting alternative routes for consideration in Round 3.

### Round Three Consultation

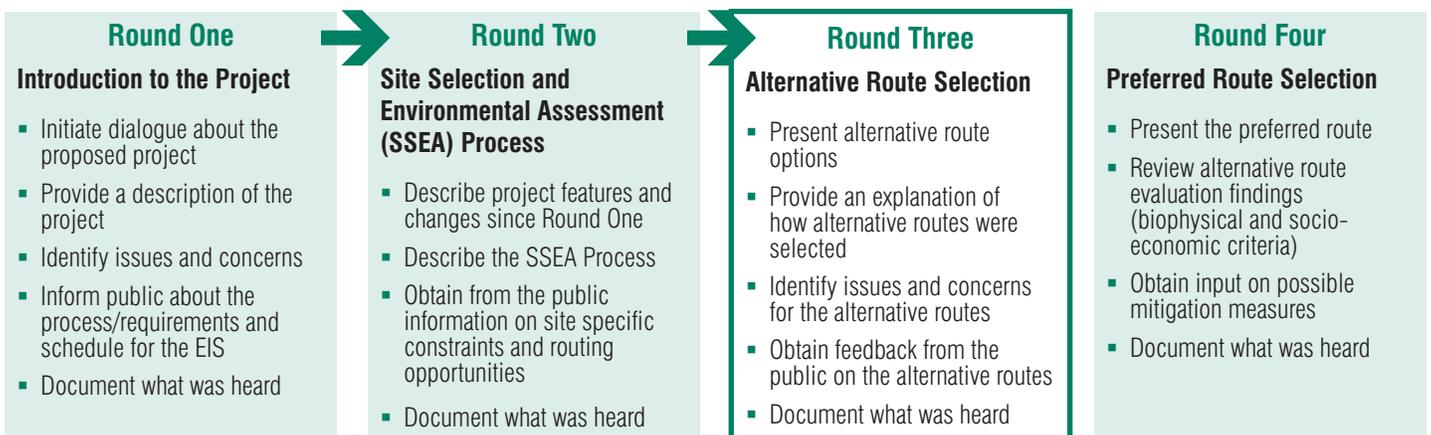
The main purpose of this round of consultation is to provide an opportunity for stakeholders and the public to review and comment on the alternative routes. The stakeholder input will be key in selecting a preferred route for the project. Along with the input from Round 3, the alternative route options will be subject to further evaluation and comparison by the Bipole III study team. Round Three consultation will consist of many stakeholder meetings and Community and Regional Open Houses.

### What We Heard During Round Two

Round 2 of the consultation process for Bipole III was used to gather information on possible routing constraints and opportunities.

Multiple meetings, and Community and Regional Open Houses were carried out throughout the conceptual study area in order to gain feedback from the public on landscape features that were important to them and indicate areas that should be avoided by transmission line routes.

## Four Rounds of Consultation



**WE ARE HERE**



During Round 2 consultation many issues were discussed including:

- Agricultural uses within the transmission right-of-way;
- Effects on property values;
- Export opportunities related to this project;
- Potential environmental effects:
- Construction of buildings within the transmission right-of-way;
- Property acquisition and easement;
- Employment opportunities;
- Community benefits; and
- Alternate locations for the transmission line including underground, under Lake Winnipeg or on the eastern side of Manitoba.

## Environmental Assessment is Key

A key requirement of preliminary planning for the project will be the completion of a comprehensive Environmental Impact Statement (EIS) that will:

- Identify potential effects the project may have on the environment and people;
- Determine ways to avoid, reduce or mitigate potential negative effects;
- Determine ways to enhance potential positive effects; and
- Develop follow-up and monitoring programs.

## Bipole III Environmental Studies are Currently Underway



Manitoba Hydro has begun collecting information that will contribute to the environmental assessment of the project. These studies will assess the 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.

Manitoba Hydro is committed to seeking Aboriginal Traditional Knowledge as well as science-based knowledge for use in the assessment of the Bipole III project. Aboriginal Traditional Knowledge will provide important perspectives on the environmental and socio-economic implications of developing and operating the proposed project. This will enhance the environmental assessment leading to improved mitigation and project benefits.

## Next Steps

A preferred route will be selected in early 2010 based on review of Round 3 input and on-going studies. The fourth and final round of consultation will provide opportunity for review of the preferred route prior to project submission to regulatory authorities for environmental approval.

The project Environmental Impact Statement (EIS) will be submitted for review and approval under the *Canadian Environmental Assessment Act* and *The (Manitoba) Environment Act* as well as under other federal and provincial legislation. The EIS will be available for public review and comment. It is anticipated there will be public hearings for this project.



| TASKS                            | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 - 2017 |
|----------------------------------|------|------|------|------|------|-------------|
| Round One Consultation           | █    |      |      |      |      |             |
| Round Two Consultation           |      | █    |      |      |      |             |
| Develop Alternative Routes       |      | █    |      |      |      |             |
| Round Three Consultation         |      |      | █    |      |      |             |
| Preferred Route Selection        |      |      | █    |      |      |             |
| Evaluation of Preferred Route    |      |      | █    |      |      |             |
| Round Four Consultation          |      |      | █    |      |      |             |
| Submit EIS for Regulatory Review |      |      |      | ★    |      |             |
| Regulatory Review and Approval   |      |      |      |      | █    |             |
| Construction                     |      |      |      |      |      | █           |
| In-Service Date                  |      |      |      |      |      | ★           |

## What is the Project Timeline?

We are currently in the third round of consultation with the fourth and final round scheduled to be completed by the end of 2010. The Environmental Impact Statement (EIS) required for environmental approval and licensing will be completed and filed by the end of June 2011. Receipt of the Environment Act Licence is needed in the Fall of 2012 to meet an in-service date of 2017.



## We Want To Hear From You

We would like to hear from you. There are a number of ways you can participate in the review of this project 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 website
- Or contact us directly



## Contact Information

### C.B. (Carl) Johnson

Licensing & Environmental  
Assessment Dept.  
Manitoba Hydro  
P.O. Box 7950, Station Main  
Winnipeg, MB R3C 0J1  
Ph: (204) 474-3454  
Fax: (204) 474-4974  
**E-mail: [cbjohnson@hydro.mb.ca](mailto:cbjohnson@hydro.mb.ca)**

### Patrick McGarry

Licensing & Environmental  
Assessment Dept.  
Manitoba Hydro  
P.O. Box 7950, Station Main  
Winnipeg, MB R3C 0J1  
Ph: (204) 474-3016  
Fax: (204) 474-4974  
**E-mail: [pmcgarry@hydro.mb.ca](mailto:pmcgarry@hydro.mb.ca)**

## Website Address

Project information is also available at [www.hydro.mb.ca/projects/bipoleIII/](http://www.hydro.mb.ca/projects/bipoleIII/)