Bipole III Transmission Project

Clean Environment Commission
Public Hearings

Environmental Assessment Consultation Program (EACP)

Trevor Joyal

Overview

1. Goals and Approach
2. Involvement Methods
3. Notification Methods
4. Materials Presented
5. Feedback Incorporation
6. Ongoing Participation

Winnipeg Public Open House
December 2010

1. Goals and Standards of the EACP

- Provide timely and relevant information on the Project
- Provide opportunities to receive feedback
- Incorporate feedback into project decision making

- CEAA standards
  - Early Notification
  - Accessible Information
  - Shared Knowledge
  - Sensitive to Community Values
  - Reasonable Timing
  - Appropriate Levels of Participation
  - Adaptive Process
  - Transparent Results

Section 5.0 - Table 1.0
EACP Technical Report

Approach

- 4 Round approach
  - Project Information
  - Constraints and Opportunities
  - Alternative Routing Options
  - Preliminary Preferred Route
- Broad study area to a more refined right-of-way
- Variety of engagement mechanisms

Section 6.0 – EACP Technical Report

EACP Approach

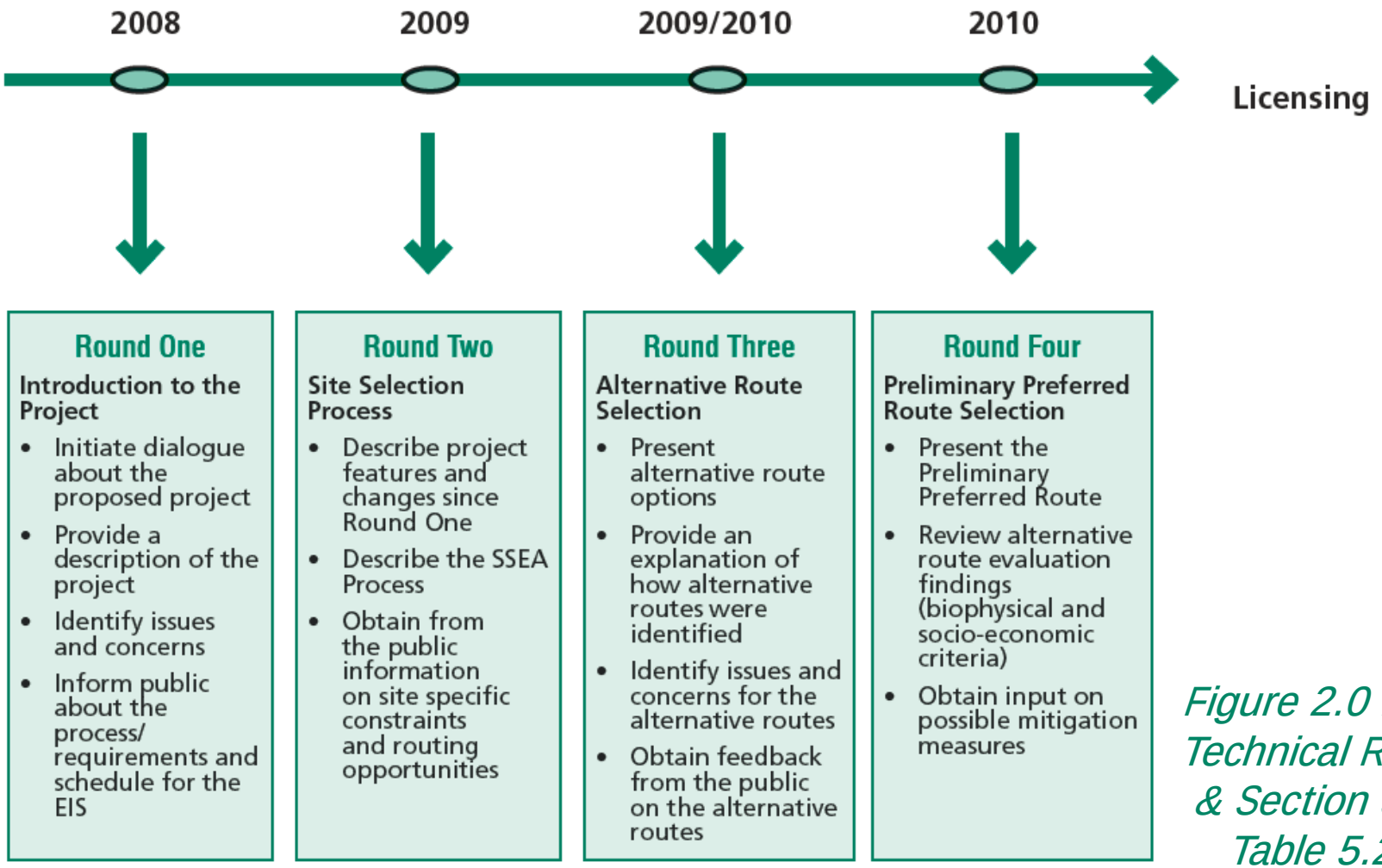


Figure 2.0 EACP Technical Report & Section 5.2 - Table 5.2-1

Who Participated?

- All members of the public were welcome to participate
- Aboriginal and stakeholders directly engaged
- Stakeholder involvement increased with determination of the PPR
- Stakeholders were provided opportunity to participate and were added to mailing lists when Project team was notified of their interest

MSL Appendix C EACP Technical Report

2. Methods of Participation

- Leadership Meetings
- Council Meetings
- Stakeholder/Interested Parties
- Website
- Community and Regional Open Houses
- Landowner Information Centres
- Toll Free Project Information Line
- Email Address

Section 6 – EACP Technical Report

Meetings

- 244 meetings held
  - Community/Municipal/ First Nation Leadership
  - Stakeholders
  - Aboriginal Organizations
- Presentation
- Q & A sessions
- Materials left

RM of Dufferin Council Chambers (image – pembinatoday.ca)

Meeting Notes - Appendix F1 – F4 EACP Technical Report

Landowner Information Centres

- 42 Landowner Information Centres held along the PPR
- Notification to Landowners only, to provide a venue for one-on-one discussions with a Manitoba Hydro representative
- Routing suggestions taken into consideration by the Project team
- Tower locations
- Process, timelines and construction
- Compensation

Section 5.3.3

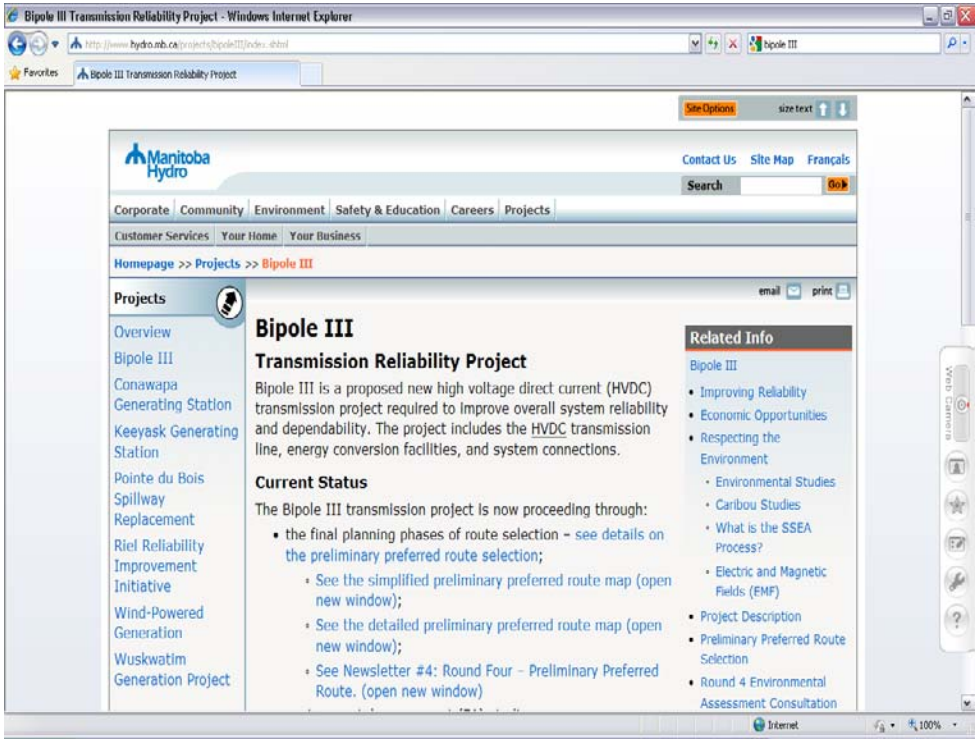
Community and Regional Open Houses

- 137 Open Houses held throughout the EACP
- Locations chosen to minimize commute and based on proximity to alternatives/preferred
- Mapping, storyboards, tangibles & presentations
- Technical, construction, EA staff on hand

Appendix B – EACP Technical Report

Project Website

- Project Description
- Process & Status
- Materials
  - Newsletters (All Rounds, EMF, Ground Electrode)
  - Comment Sheets
  - Reports
  - Mapping
- Location of Regional Open Houses
- Complete EIS Filing



Bipole III Website Main Page (2010)

Information Line and Email

- Operational since July 2010
- 300+ calls received to date
- Listed on materials and notifications
- Calls/emails responded to in a timely manner
- Staffed & voicemail
- Responses provided during the morning, afternoon and evening

Figure 5.0 – EACP Technical Report

3. Methods of Notification

- Direct Mailings
- Postcards
- Posters
- Radio
- Newspaper
- Website

Open House Listing

Manitoba Hydro

Bipole III Transmission Project - Preliminary Preferred Route

All Open Houses are drop-in from 4:00 to 8:00 pm. Refreshments will be served.

Winnipegosis	Winnipegosis Elks Hall	337 3rd Street, Winnipegosis	October 5, 2010
Minitonas	Minitonas Community Hall	302 Main Street, Minitonas	October 7, 2010
Ste. Rose du Lac	Ste. Rose du Lac Community Hall	555 1st Street South, Ste. Rose du Lac	October 12, 2010
Alonsa	Alonsa Community Hall	12 PTH 50, Alonsa	October 13, 2010
Langruth	Langruth Community Hall	Main Street, Langruth	October 14, 2010
MacGregor	MacGregor Community Hall	53 North Railway Street NE, MacGregor	October 18, 2010
Elm Creek	Elm Creek Community Hall	70 Arena Road, Elm Creek	October 19, 2010
Carman	Carman & District Hall	1st Avenue South, Carman	October 20, 2010
Brunkild	Brunkild Memorial Recreation Centre	10 PR 305, Brunkild	October 21, 2010
Ste. Agathe	Ste. Agathe Community Hall	304 Chemin Pembina Trail, Ste. Agathe	October 25, 2010
Ste. Anne	Seine River Banquet Centre	A-80 Arena Road, Ste. Anne	October 26, 2010
Dugald	Dugald Community Centre	544 Holland Street, Dugald	October 28, 2010
The Pas	Wescana Inn - Banquet Hall	439 Fischer Avenue, The Pas	November 1, 2010
Snow Lake	Snow Lake Community Hall	200 Cherry Avenue, Snow Lake	November 2, 2010
Thompson	St. Joseph's Ukrainian Catholic Church	108 Copper Road, Thompson	November 3, 2010
Gillam	Gillam Recreation Centre	235 Mattonabee Avenue, Gillam	November 4, 2010
Winnipeg	Holiday Inn South - Main Ballroom	1330 Pembina Highway, Winnipeg	November 8, 2010
Portage la Prairie	Army Navy & Air Force Hall	25 3rd Street NE, Portage la Prairie	November 9, 2010

Postcard – Round 4 Postal Code Notification

Section 7.0 – EACP Technical Report

Direct Mailings

- Used throughout each Round
- 4,210 direct letters mailed (Round 4)
  - Landowners, ½ mile, general public, RMs, quarry lease holders, outfitters, First Nations, NACCs, stakeholders, government...
- Contained localized and study area mapping
- Newsletter
- Letter contained parcels affected and associated maps
- Website and toll free information line/contact information included

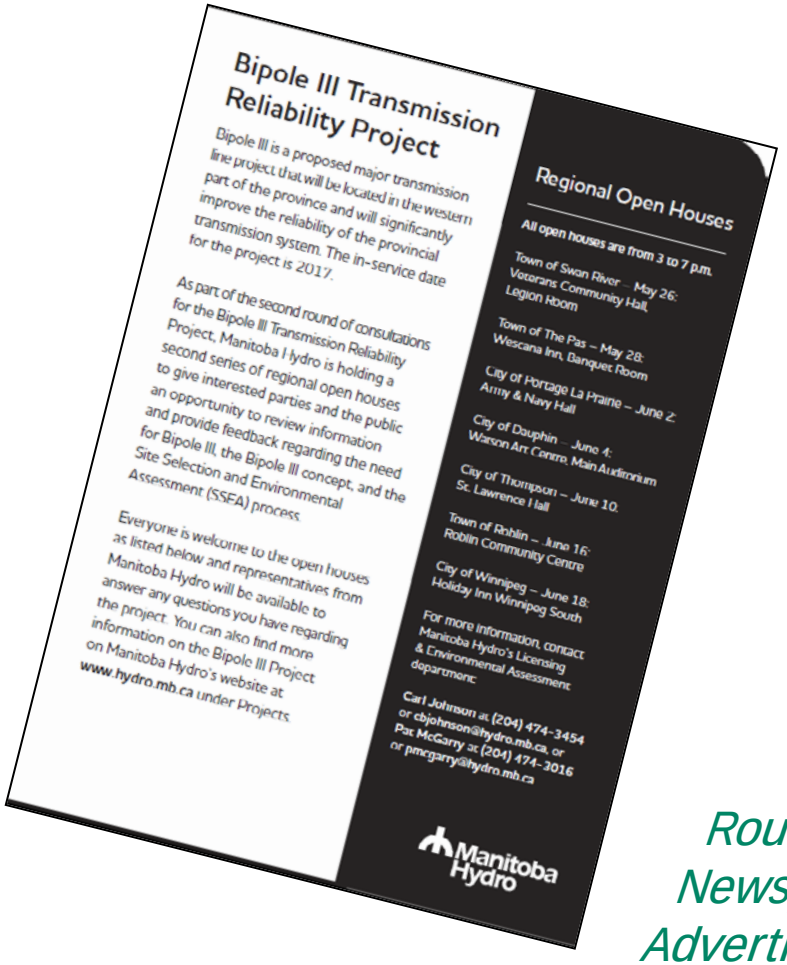
Postcards & Posters

- Posters placed in communities along the alternative routes (Round 3) and along the Preliminary Preferred Route (Round 4)
  - Post Offices
  - Grocery/Convenience Stores
  - Community Billboards
  - Restaurants
- 19,000 postcards distributed (Round 4)
  - Irregular 3” X 9” shape

Postcard Distribution – Figure 4.0 EACP Technical Report

Radio and Newspaper

- Local and Regional Newspapers and Radio Stations
- Posted/Announced over a two (2) week period prior to the Open Houses
- Location, Time, Project Description based on distribution/location



Bipole III Transmission Reliability Project

Bipole III is a proposed major transmission line project that will be located in the western part of the province and will significantly improve the reliability of the provincial transmission system. The in-service date for the project is 2017.

As part of the second round of consultations for the Bipole III Transmission Reliability Project, Manitoba Hydro is holding a second series of regional open houses to give interested parties and the public an opportunity to review information and provide feedback regarding the need for Bipole III, the Bipole III concept, and the Site Selection and Environmental Assessment (SSEA) process.

Everyone is welcome to the open houses as listed below and representatives from Manitoba Hydro will be available to answer any questions you have regarding the project. You can also find more information on the Bipole III Project on Manitoba Hydro's website at **www.hydro.mb.ca** under Projects.

Regional Open Houses

All open houses are from 3 to 7 p.m.

Town of Swan River – May 26:
Veterans Community Hall, Legion Room

Town of The Pas – May 28:
Wescana Inn, Banquet Room

City of Portage La Prairie – June 2:
Army & Navy Hall

City of Dauphin – June 4:
Watson Art Centre, Main Auditorium

City of Thompson – June 10:
St. Lawrence Hall

Town of Roblin – June 16:
Roblin Community Centre

City of Winnipeg – June 18:
Holiday Inn Winnipeg South

For more information, contact Manitoba Hydro's Licensing & Environmental Assessment department:

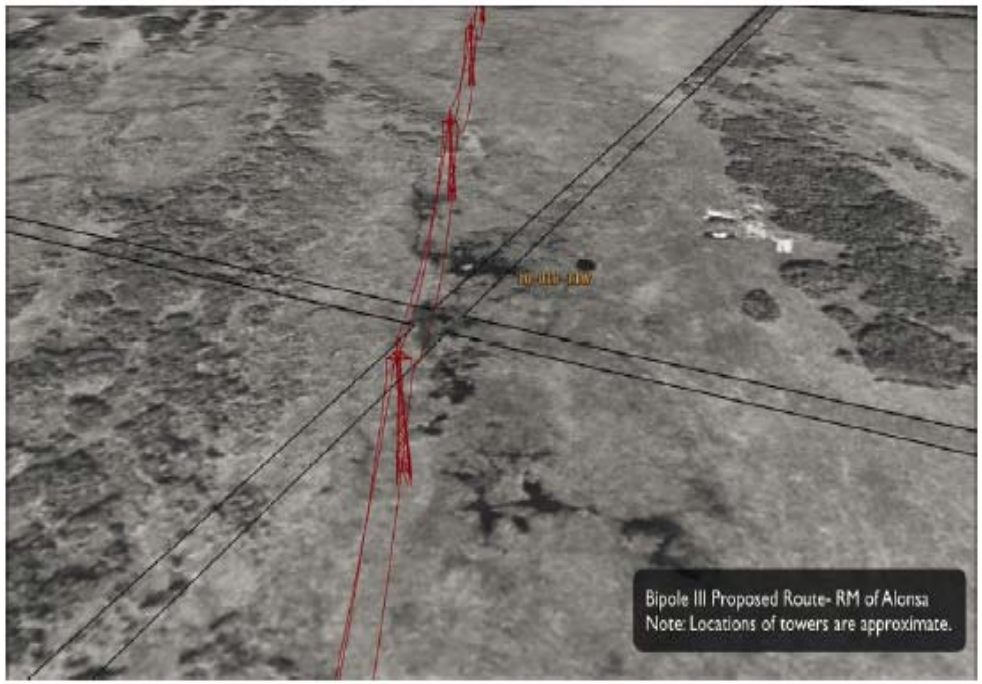
Carl Johnson at **(204) 474-3454** or **cbjohnson@hydro.mb.ca**, or **Pat McGarry** at **(204) 474-3016** or **pmcgarry@hydro.mb.ca**

Manitoba Hydro

Round 2 Newspaper Advertisement

4. Materials Presented

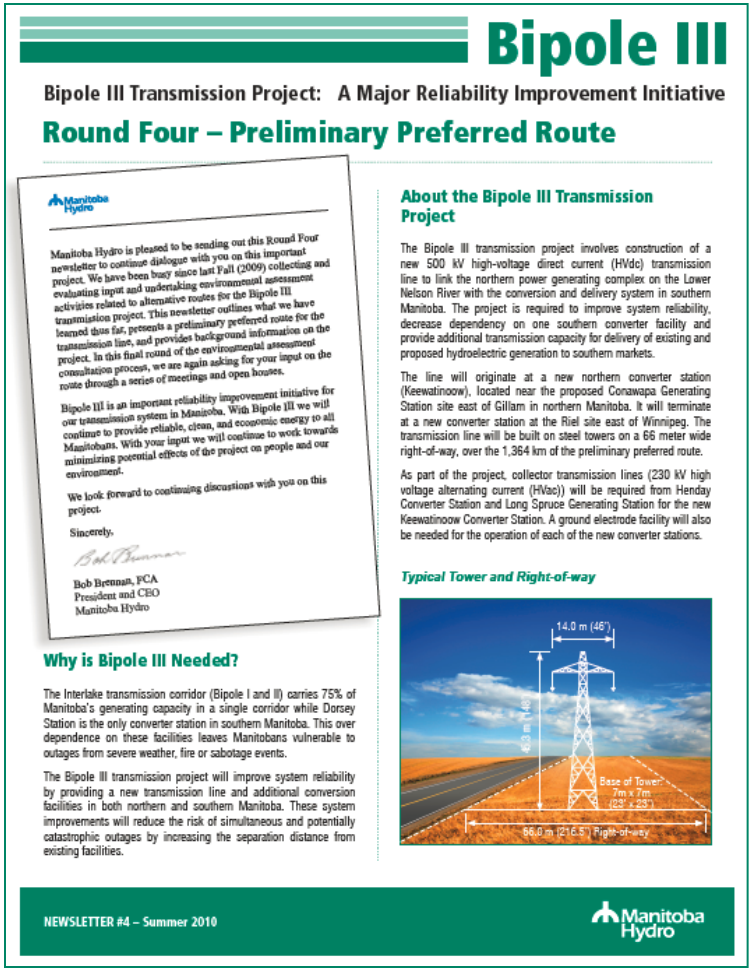
- Newsletters
- Mapping
- Exhibits
- Presentations
- Slideshows
- Feedback Forms
- Reports



Bipole III Flyover Video

Section 10.0 - EACP Technical Report

Newsletters



Bipole III

Bipole III Transmission Project: A Major Reliability Improvement Initiative

Round Four – Preliminary Preferred Route

Manitoba Hydro

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.

NEWSLETTER #4 – Summer 2010

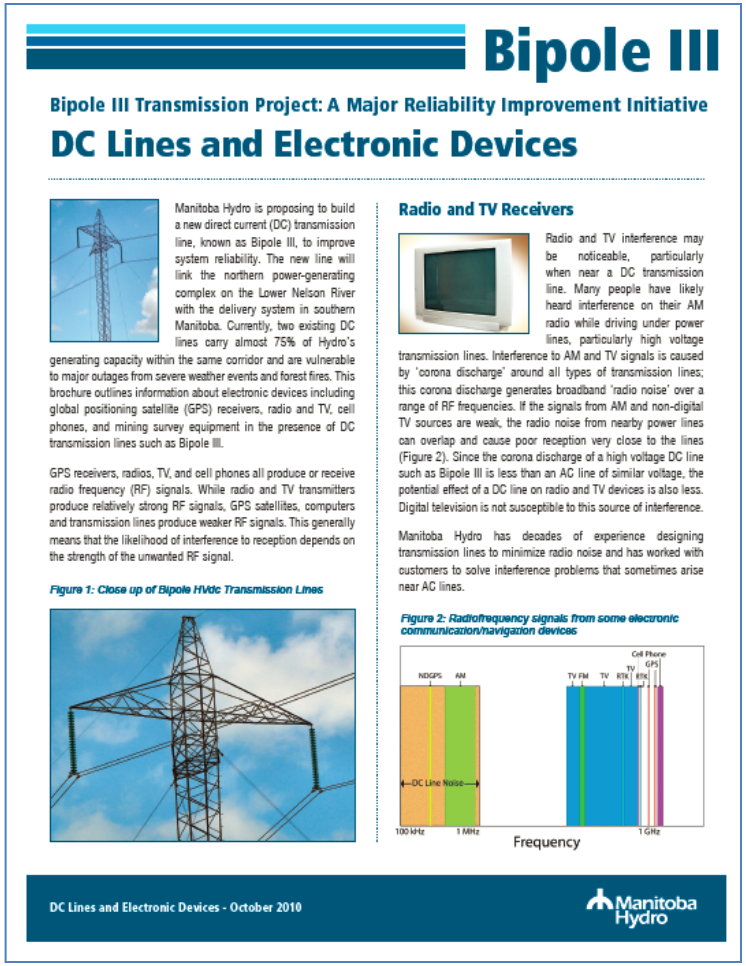
Manitoba Hydro

- New each Round
- Project Need/Components
- What We Heard
- Mapping
- Concern Identification
- Next Steps

Appendix 5A – EIS

Supplemental Newsletters

- EMF concern present throughout all Rounds
- Creation of AC and DC brochures (2009)
- Further concern regarding GPS and electronics – New brochure (2010)
- Southern Ground Electrode



Bipole III

Bipole III Transmission Project: A Major Reliability Improvement Initiative

DC Lines and Electronic Devices

Manitoba Hydro is proposing to build a new direct current (DC) transmission line, known as Bipole III, to improve system reliability. The new line will link the northern power-generating complex on the Lower Nelson River with the delivery system in southern Manitoba. Currently, two existing DC lines carry almost 75% of Hydro's generating capacity within the same corridor and are vulnerable to major outages from severe weather events and forest fires. This brochure outlines information about electronic devices including global positioning satellite (GPS) receivers, radio and TV, cell phones, and mining survey equipment in the presence of DC transmission lines such as Bipole III.

GPS receivers, radios, TV, and cell phones all produce or receive radio frequency (RF) signals. While radio and TV transmitters produce relatively strong RF signals, GPS satellites, computers and transmission lines produce weaker RF signals. This generally means that the likelihood of interference to reception depends on the strength of the unwanted RF signal.

Figure 1: Close up of Bipole HVdc Transmission Lines

Radio and TV Receivers

Radio and TV interference may be noticeable, particularly when near a DC transmission line. Many people have likely heard interference on their AM radio while driving under power lines, particularly high voltage transmission lines. Interference to AM and TV signals is caused by 'corona discharge' around all types of transmission lines; this corona discharge generates broadband 'radio noise' over a range of RF frequencies. If the signals from AM and non-digital TV sources are weak, the radio noise from nearby power lines can overlap and cause poor reception very close to the lines (Figure 2). Since the corona discharge of a high voltage DC line such as Bipole III is less than an AC line of similar voltage, the potential effect of a DC line on radio and TV devices is also less. Digital television is not susceptible to this source of interference.

Manitoba Hydro has decades of experience designing transmission lines to minimize radio noise and has worked with customers to solve interference problems that sometimes arise near AC lines.

Figure 2: Radiofrequency signals from some electronic communication/navigation devices

DC Lines and Electronic Devices - October 2010

Manitoba Hydro

Section 10.0 EACP Technical Report

Feedback Forms

BIPOLE III Transmission Project:
A Major Reliability Improvement Initiative

Round 3 - Alternative Route Selection

Comment Sheet

Please provide your comments on the following topics. Your input is appreciated.

1. Alternative routes have been identified for the proposed Bipole III Transmission Project. What do you feel are important **environmental** issues for the individual routes?

Route A (please note which Route A segment or approximate location you are referring to)

Route B (please note which Route B segment or approximate location you are referring to)

Route C (please note which Route C segment or approximate location you are referring to)

2. What do you feel are important **social and/or economic** issues for the individual routes?

Route A (please note which Route A segment or approximate location you are referring to)

Route B (please note which Route B segment or approximate location you are referring to)

Route C (please note which Route C segment or approximate location you are referring to)

3. What do you consider to be some of the benefits of this project?

Manitoba Hydro

- Made for each Round including southern ground electrode
- Reflected Goals of each round
- Used for LICs
- Available on the website

Commentary - Appendix E - EACP Technical Report

Mapping & Exhibits

- Conductors, insulators, tower models, etc.
- Localized mapping
- Large and small scale
- Landowner map books
- Aerial photography

Section 10.0 EACP Technical Report

Slideshows & Presentations

Aerial Photography – ArcReader™ Software

- Story boards
- Google Earth
- Fly over – by location
- *ArcReader™* software
- Project need and process video
- Construction Slideshow

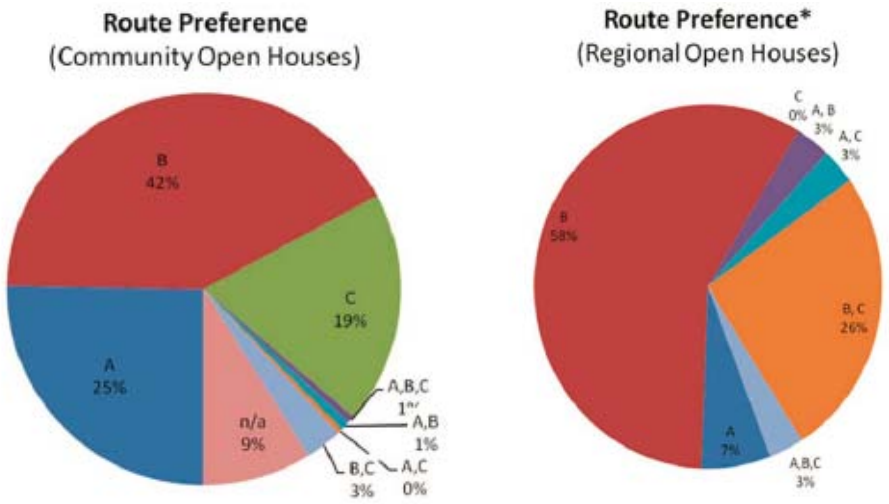
5. Incorporation of Feedback

- Routing
- Process
- Material Creation & Modification
- Additional Presentations
- Preliminary Preferred to Final Preferred Route
- Tourond Routing Adjustment

Round 4 Open House – Portage La Prairie 2010

Routing

- Round 3 Feedback and the incorporation into the RSM
- Diagonal routing (Round 3)
- ½ mile alignments (Round 4)
- Equipment considerations (Agriculture)



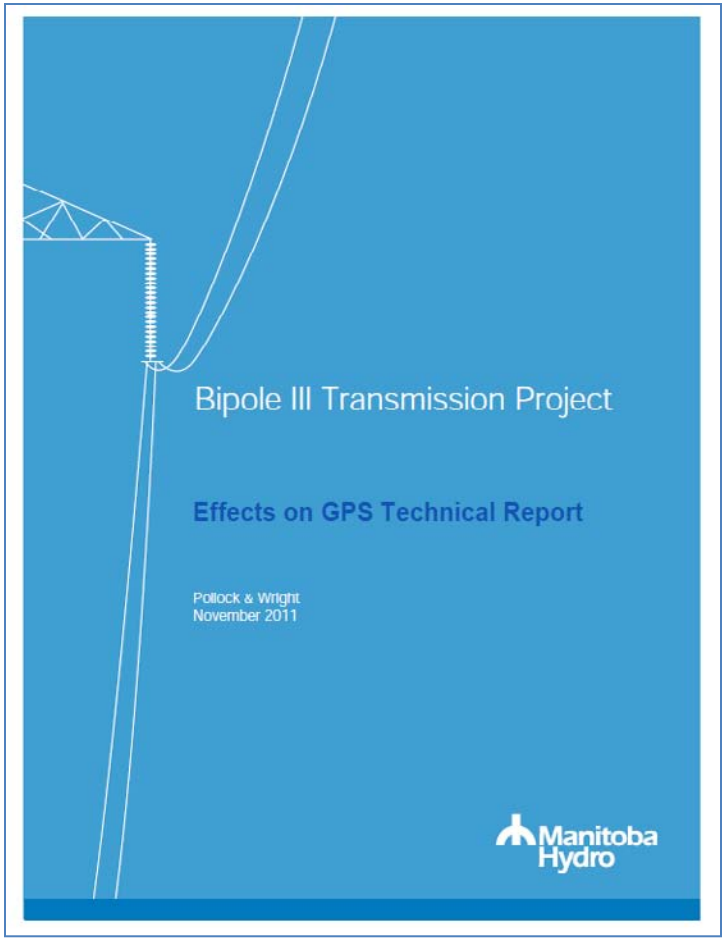
Figures 21.0 and 22.0 of the EACP Technical Report

Process Modification

- Postcard Notification
- Landowner Compensation (Round 3 – 4)
- Landowner Information Centres
- Planning District Level – Rural Municipalities
- Community Open House based on feedback received during Round 1

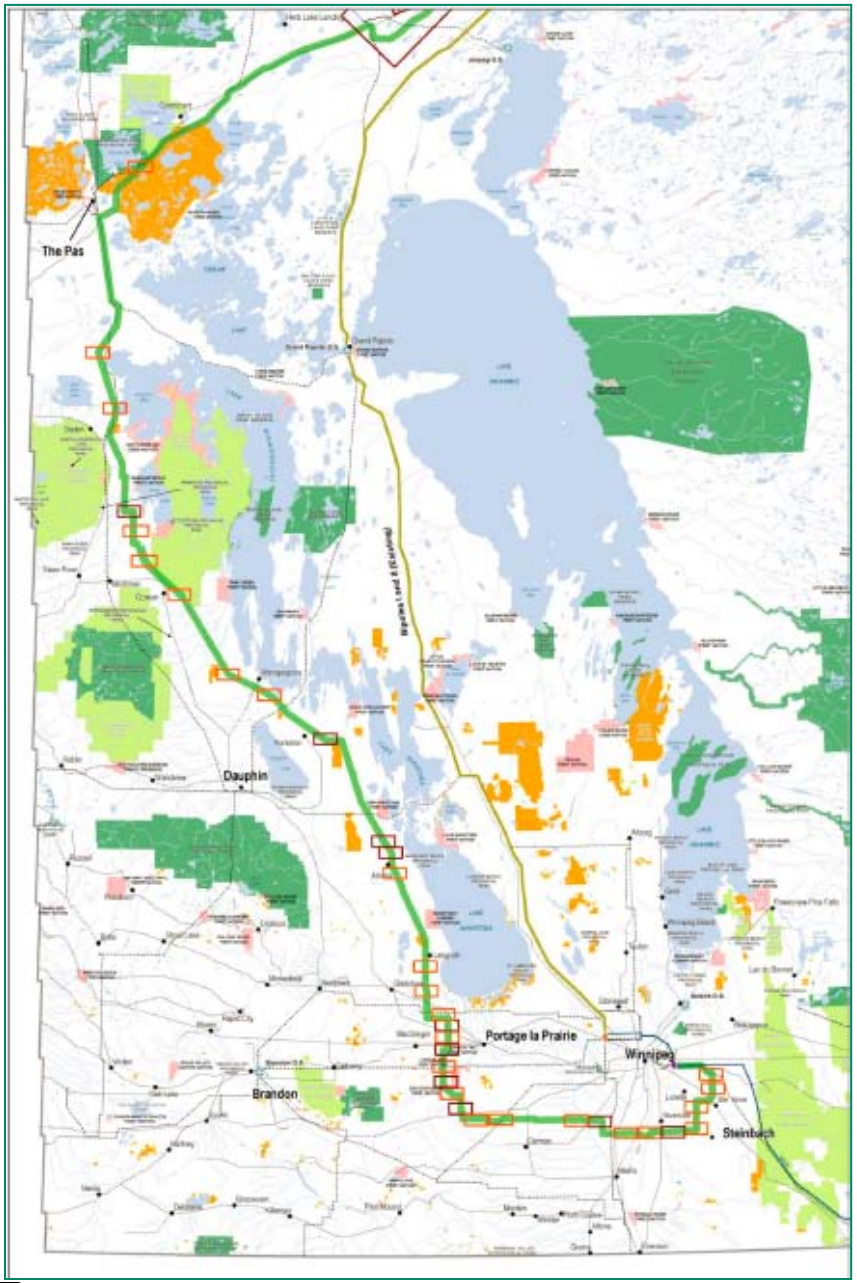
Material Creation & Modification

- EMF Brochures (AC, DC & DC and Electronics)
- GPS – Undertook a study in relation to Bipole I & II (filed with EIS)
- Modification of feed back forms based on community feedback
- Detailed mapping (Open Houses and Direct Mailings)



Additional Presentations & Meetings

- Additional Stakeholders who expressed interest in the Project
- Additional Presentations for Community Leadership
- Additional Open Houses – Brandon & Rossburn
- Landowner Site Visits with Project Team and Specialists

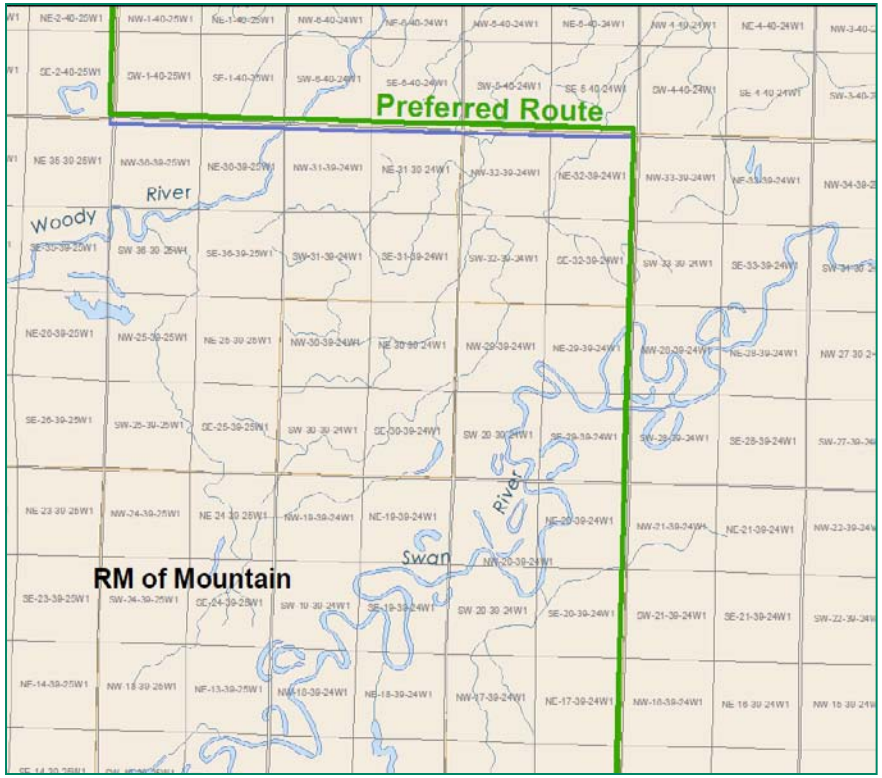


PPR Adjustments

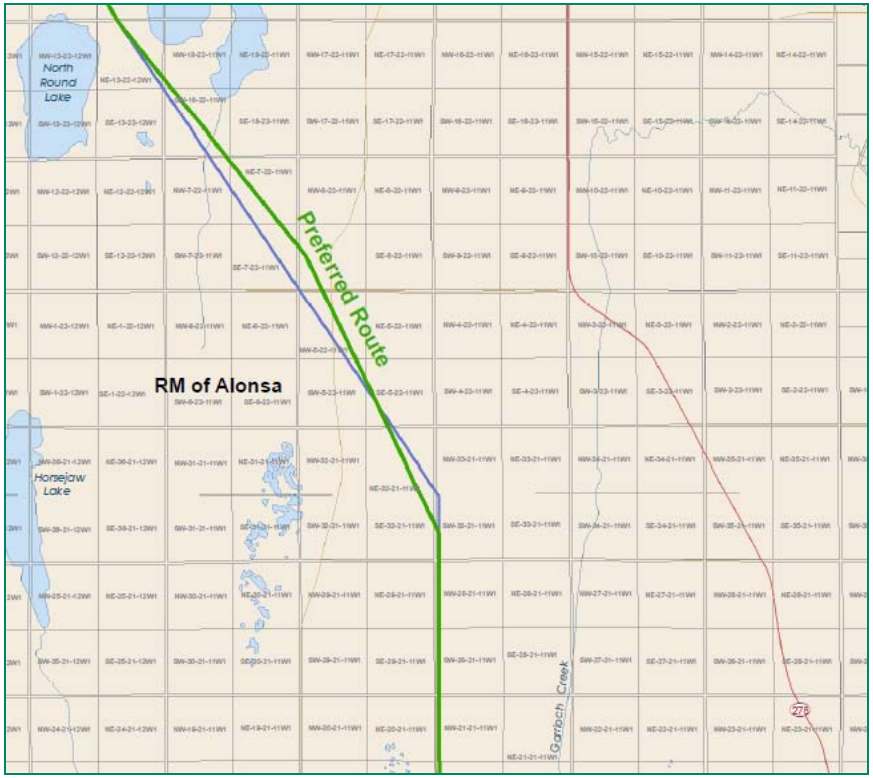
- Feedback from Round 4 meetings and LICs
- 57 individual routing suggestions
- Landowners, Stakeholders, First Nations and community members
- Considered by the project team

Figure 27.0 and Table 8.0
EACP Technical Report

PPR Adjustments - Examples

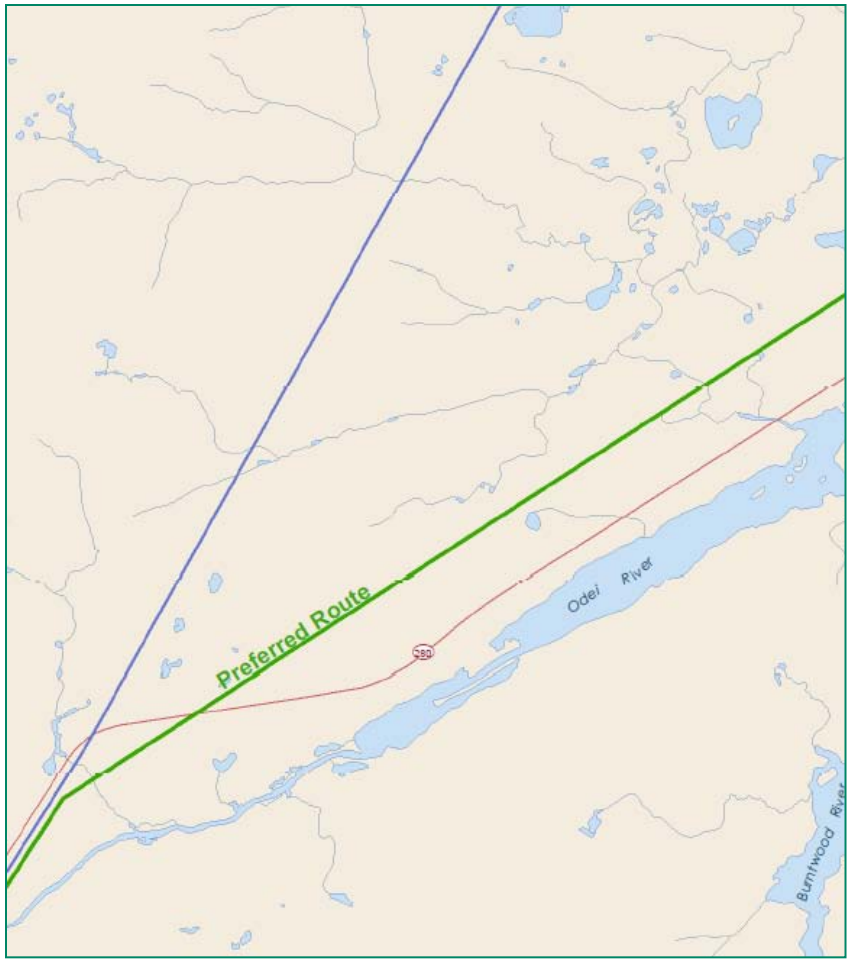


Landowner Suggested Route Realignment Accepted by Project Team (RM of Mountain)



Landowner Suggested Route Realignment Accepted by Project Team (RM of Alonsa)

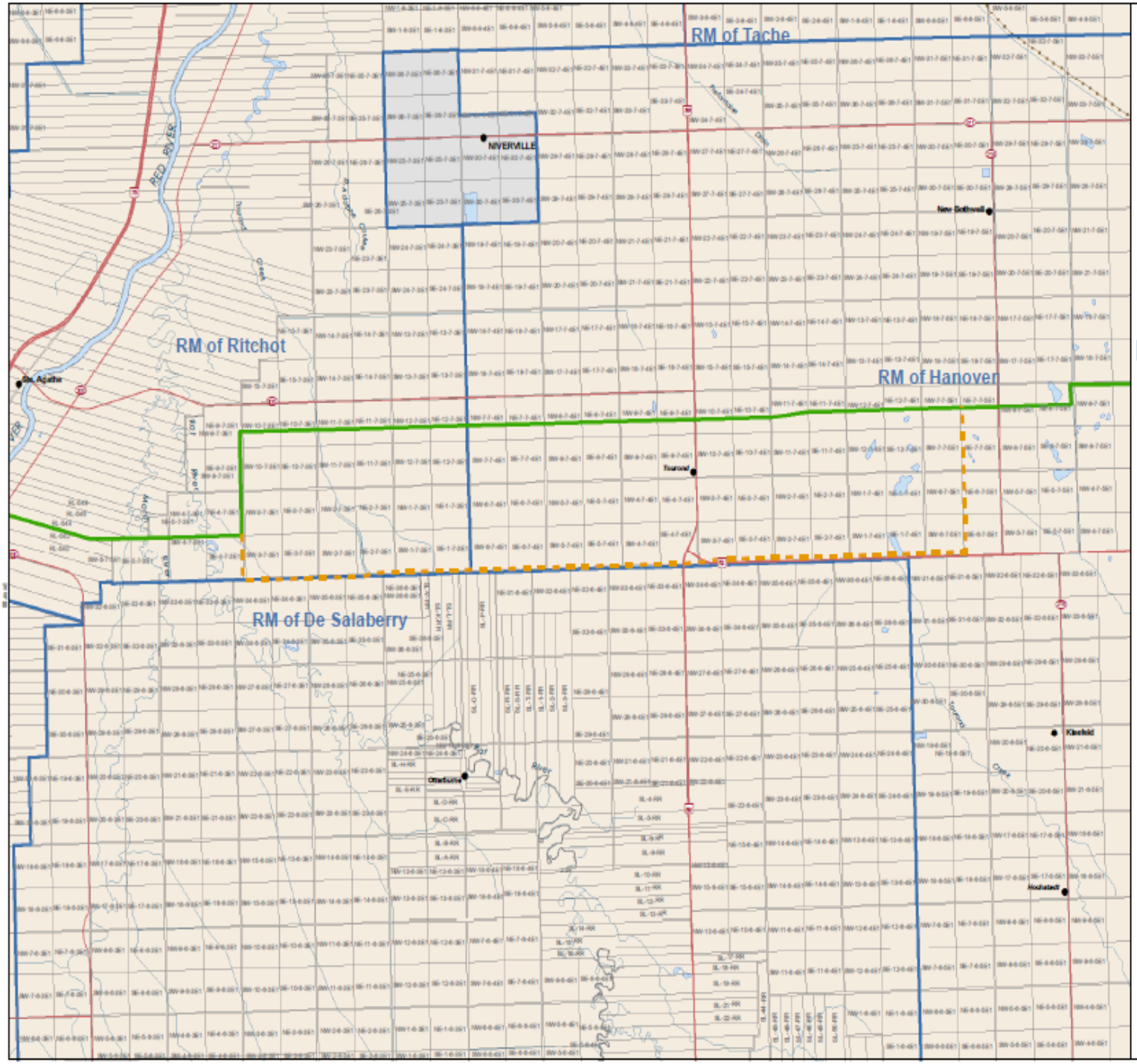
PPR Adjustments - Examples



Suggested Route Adjustment – Tataskweyak Cree Nation – Accepted by Project Team (portions)

Tourond Routing Adjustment

- Localized Feedback
- Routing criteria not adequately represented in the area
- 6 LIC day and evening sessions held in Ste. Agathe
- Presented a potential routing adjustment
- Municipal Council meetings held
- MCWS submission February 2012


RM of Tache
NIVERVILLE
RM of Ritchot
RM of Hanover
RM of De Salaberry
New Bothwell
Tourond
Ste. Agathe
Otterburne
Kleinfeld
Rochester
PEMBINA HIGHWAY
RED RIVER
Manitoba Hydro
Bipole III Transmission Project
Proposed Infrastructure
Final Preferred Route
Potential Routing Adjustment
Existing Infrastructure
Transmission Line
Landbase
City and Town
RM / LGD Boundary
Road
Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, ProvMB
Date Created: October 26, 2011
N
0 0.5 1 2 Kilometres
0 0.5 1 2 Miles
1:75,000
Final Preferred Route
with Tourond Adjustment
Map 1

Tourond Results

5.4 SUMMARY OF ALL PARTICIPANTS

The participation of 45 landowners in the consultation process represented 105 land titles in the area. The following table summarizes the route acceptance of all land titles holders within a half-mile of both routes in the Tourond area.

Table 5-5: Route Preference of All Participants

	Accepting of Final Preferred Route (FPR)	Accepting of Potential Route Adjustment (PRA)	No Preference Provided	Total
Number of Land Titles Represented	35 (33.3%)	50 (47.6%)	20 (19.1%)	105 (56.2%)

The PRA has a higher level of acceptance by those in the Tourond area as a whole representing 50 of the 105 land titles (47.6%) along both route options that participated in the process.

Section 5 – Tourond Proposed Route Adjustment Report

6. Ongoing Engagement

- Community/stakeholder engagement for the Environmental Protection Plans and Access Management Plans
- Email address and Project phone line remain operational
- Website updated as new information becomes available to the public
- Easement agreements – Landowner suggestions on tower locations or line modifications

Summary

- Extensive notification utilized throughout the EACP
- A variety of engagement mechanisms used to provide information and to receive feedback
- Materials generated were well received by participants
- Feedback incorporated in route selection and the assessment