

Appendix A

A1 – Map 1-1: Round 3
Preferred Route

A2 – Map 1-2: Border Crossing
Modification Alternative Route
Segments

A3 – Map 1-3: Overview of
Round 3 Preferred Route Map
Series

Project Infrastructure

- Converter Station (Existing)
- Preferred Route

Infrastructure

- Existing 500kV Transmission Line
- Existing 230kV Transmission Line

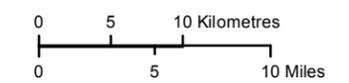
Assessment Area

- Adjusted Border Crossing
- Route Planning Area

Landbase

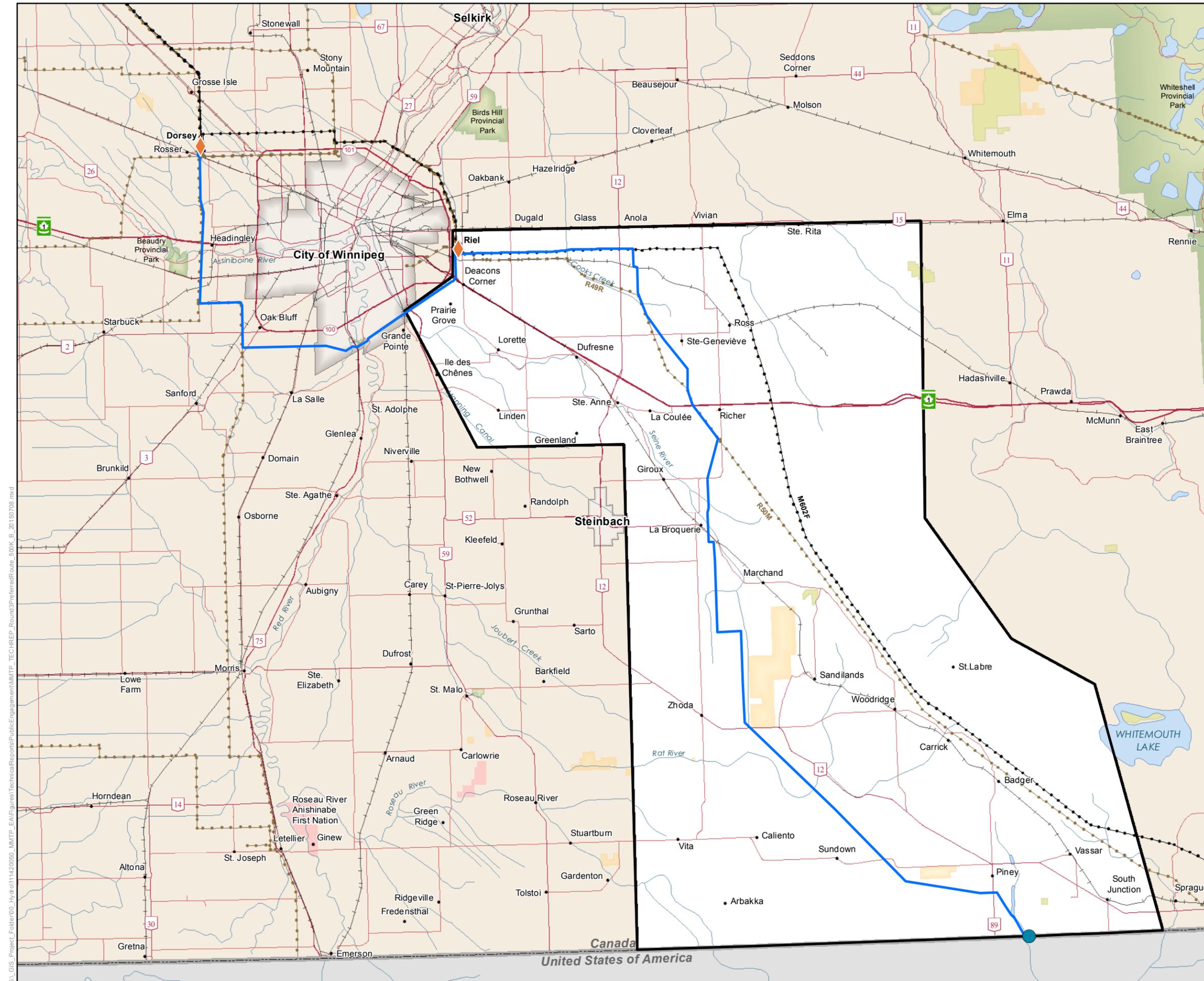
- Community
- Railway
- Trans Canada
- Provincial Highway
- Provincial Road
- City
- First Nation Lands
- Ecological Reserve
- Wildlife Management Area
- Provincial Park

Coordinate System: UTM Zone 14N NAD83
 Data Source: MBHydro, ProvMB, NRCAN
 Date Created: July 14, 2015



1:500,000

Round 3 Preferred Route



G:\GIS_Projects\Hydro\11420000_11MTP_EA\Figures\TechnicalReports\PublicEngagement\11MTP_TECHREP_Round3PreferredRoute_500K_B_20150708.mxd

Appendix A

A1 – Map 1-1: Round 3
Preferred Route

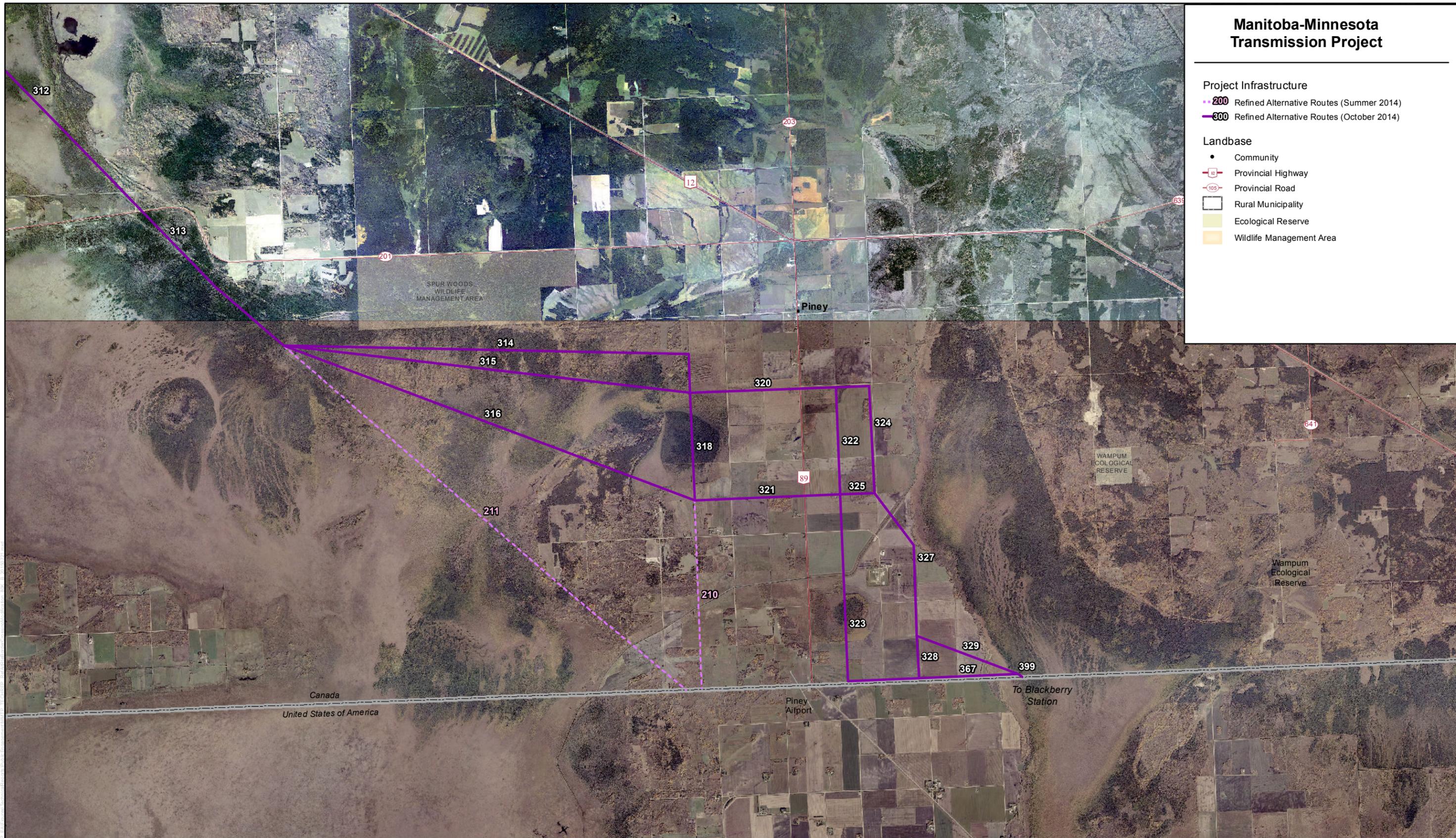
A2 – Map 1-2: Border Crossing
Modification Alternative Route
Segments

A3 – Map 1-3: Overview of
Round 3 Preferred Route Map
Series

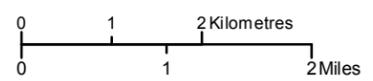
Manitoba-Minnesota Transmission Project

- Project Infrastructure**
- 200 Refined Alternative Routes (Summer 2014)
 - 300 Refined Alternative Routes (October 2014)

- Landbase**
- Community
 -  Provincial Highway
 -  Provincial Road
 -  Rural Municipality
 -  Ecological Reserve
 -  Wildlife Management Area



Coordinate System: UTM Zone 14 NAD 83
 Data Source: MBHydro, ProvMB, NRCAN
 Date Created: 21 July, 2015



Refined Alternative Routes for Border Crossing Modification (October 2014)

Draft: For Discussion Purposes Only

Appendix A

A1 – Map 1-1: Round 3
Preferred Route

A2 – Map 1-2: Border Crossing
Modification Alternative Route
Segments

A3 – Map 1-3: Overview of
Round 3 Preferred Route Map
Series

Manitoba-Minnesota Transmission Project

Project Infrastructure

- Converter Station (Existing)
- Final Preferred Route (FPR)

Infrastructure

- Existing 500kV Transmission Line
- Existing 230kV Transmission Line

Landowner Information Form Mapping Areas

- Mapping Areas With Comments
- Map Areas and Corresponding Map Number

Landbase

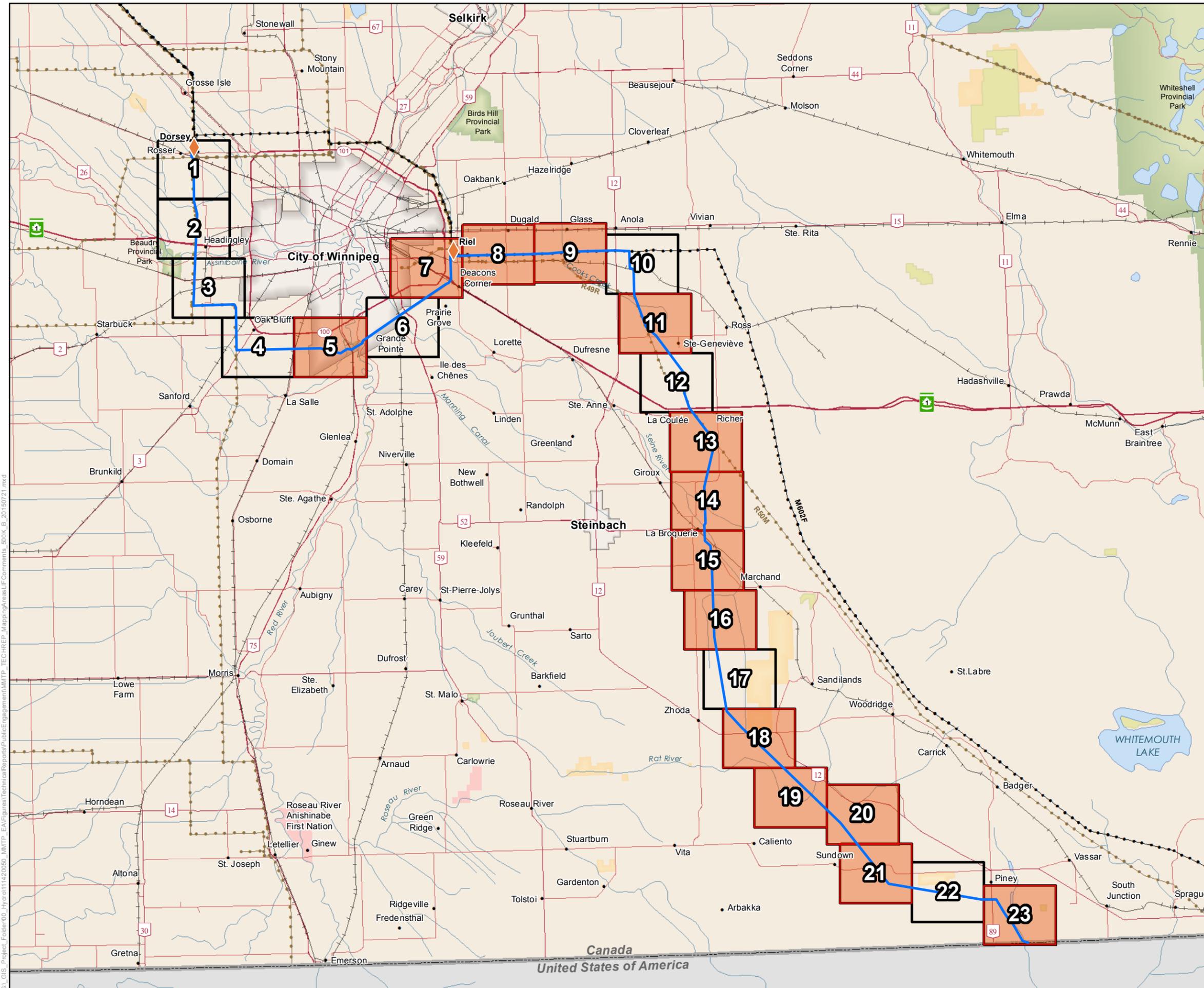
- Community
- Railway
- Trans Canada
- Provincial Highway
- Provincial Road
- City
- First Nation Lands
- Ecological Reserve
- Wildlife Management Area
- Provincial Park

Coordinate System: UTM Zone 14N NAD83
 Data Source: MBHydro, ProvMB, NRCAN
 Date Created: July 21, 2015



1:500,000

Mapping Areas from Landowner Information Form Comments



G:\GIS_Projects\Hydro\11420000_1M1TP_EA\Figures\TechnicalReports\PublicEngagement\1M1TP_TECHREP_MappingAreas\LFComments_500K_B_20150721.mxd

Appendix B

B1 – Border Crossing
Modification Advertisement

B2 – Border Crossing
Modification Meeting Minutes

We want to hear from you.

Manitoba–Minnesota Transmission Project Border Crossing Modification

Manitoba Hydro is proposing to construct a 500-kilovolt transmission line from Winnipeg to Minnesota to sell surplus power and enhance the reliability of supply in Manitoba in times of drought or emergency.

Manitoba Hydro has had ongoing discussions with Minnesota Power regarding concerns with the Piney / Pinecreek Border Airport located on the international border south of Piney, Manitoba. Due to these concerns, both Manitoba Hydro and Minnesota Power have determined that a border crossing located southeast of Piney would address the concerns raised.

Due to this border crossing modification, alternative segments have been developed to connect to the Great Northern Transmission Line.

To better understand local interests and concerns, we want to hear from you. We will be holding a drop-in open house at the Piney Community Centre on November 12 from 4 to 8:00 p.m. The feedback collected will help determine a preferred route for the project, which we will share with the public in early 2015.

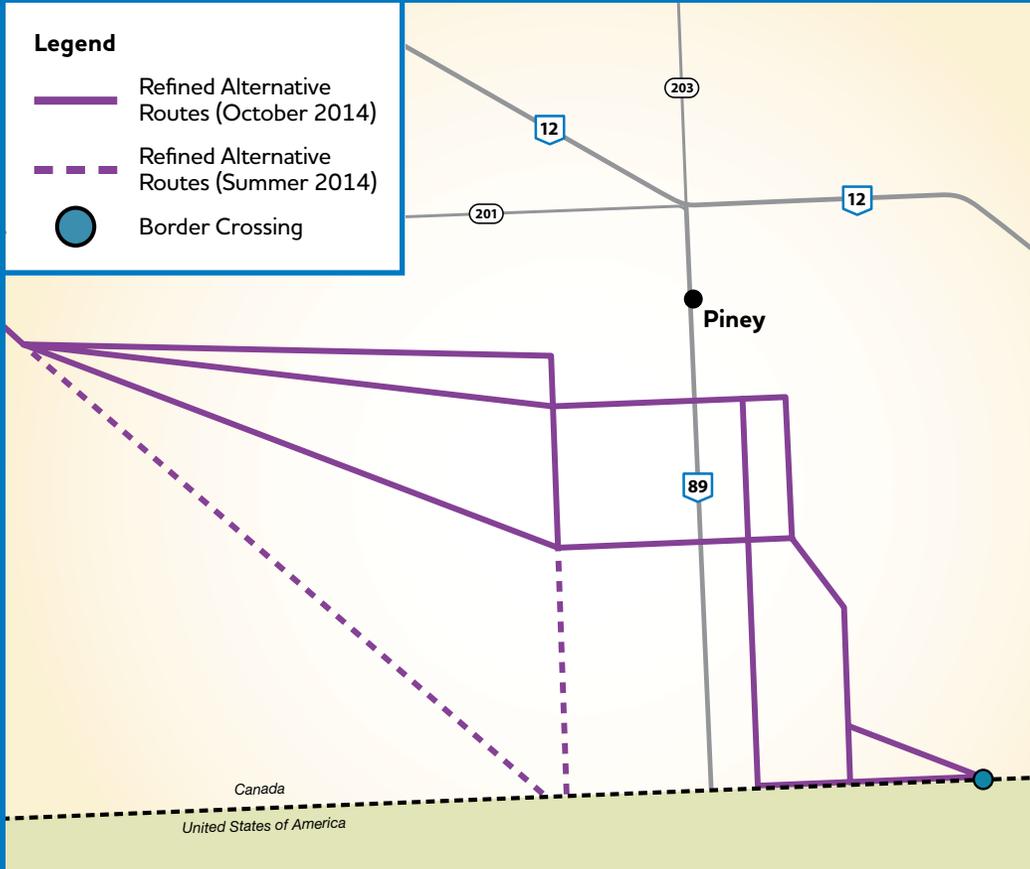
Drop-in Open House
Piney Community
Centre
November 12, 2014
4 to 8:00 p.m.

All are welcome to attend.
Refreshments will be served.



Legend

-  Refined Alternative Routes (October 2014)
-  Refined Alternative Routes (Summer 2014)
-  Border Crossing



Contact us

If you would like more information, or are unable to attend an open house, please visit our webpage at www.hydro.mb.ca/mmtp.

You can also provide feedback or get additional information on the Manitoba-Minnesota Transmission Project by calling our toll-free information line at **1-877-343-1631** or emailing us at mmtp@hydro.mb.ca



Appendix B

B1 – Border Crossing
Modification Advertisement

B2 – Border Crossing
Modification Meeting Minutes

GENERAL INFORMATION

Record of Meeting

Title Landowner Meeting RE: Border Crossing Modification
Project MMTP
Participant Landowner
Round Round 2
Date of Meeting Tuesday, November 04, 2014
Location Pineland Colony - Piney
In Attendance Landowner and Representatives (4), Manitoba Hydro (2), RM of Piney Councillor (1)
Recorded by Manitoba Hydro

MEETING DESCRIPTION

Manitoba Hydro provided landowner with 6 packages of material (newsletter, map of border modification, AC Brochures (x3) and the Route Selection Brochure). Colony and Manitoba Hydro representatives undertook a drive through the lands owned by Pineland Colony to outline future development plans and for potential route modifications to minimize potential effects on their expansion and operations. Discussion continued regarding various aspects of the project and is outlined below.

DISCUSSION

Item	Community / Participant Comment	Manitoba Hydro Response	Category
1	Segment 323 is strongly opposed by the Colony. This follows an existing communication/fibre optic cable and there are plans for expansion regarding broilers along the main entrance into the community	Manitoba Hydro documented the concern regarding future development	<u>Routing</u>
2	In the bend of the entrance roadway to the colony there are plans for broiler locations to be placed for operations	Location was documented	<u>Agriculture</u>
3	Along segment 327 (east side of roadway) there are future plans to develop chicken coops for 1/2 mile. Alignment 327 would hinder this development.	Location was documented	<u>Routing</u>

4	The road leading west from the colony bypassing the lagoon has undertaken large scale draining activities and will potentially be interfered with along 327.	Locations were documented	<u>Routing</u>
5	Segment 325 @ junction of segments 321 and 323 is the future location of a duck and geese facility of the colony. It is planned away from the colony due to the noise generated by the birds.	Location documented	<u>Routing</u>
6	Route modification has been put forward by the colony for Manitoba Hydro to consider on predominantly their property without encroaching on Crown lands	Route modification documented	<u>Routing</u>
7	Route modification would like to see the transmission line follow close to the tree line east of the colony and follow the creek. There was discussion that we would like to avoid crown lands in the vicinity due to proposed ecological protection in the area. Noted to accommodate heavy machinery offsets could be incorporated to accommodate 120ft equipment.	Pineland Colony representatives assisted in determining ownership, location of a modification and potential offsets.	<u>Routing</u>
8	Creek located east of the Colony was noted as being low and more of a ditch than a creek. More water flows through the drainage near Jct 325&327. Noted that there are some trees in the vicinity of the creek but it is predominantly shrubby.	Documented	<u>Water</u>

9	There is an old 1930 homestead documented on the map.	Colony welcomed archaeology team to come investigate if there was interest.	<u>Archaeology</u>
10	Comment was made by colony that Elk is not common in the area but cougar sightings have been common in the past.		<u>Wildlife</u>
11	Colony representatives noted that there were wells on every quarter section in the area. They noted that artesian wells were common and that some of the wells were no more than 30ft underground.		<u>Water</u>
12	The Colony outlined their intention to use drones to monitor crop production in the future.	The transmission line would create a hinderance/hazard to the operation of the drone	<u>Agriculture</u>
13	A question was asked wheter drainage activities could be undertaken in the ROW	It was noted that ownership would remain with the colony and that activities such as drainage plan could be undertaken if coordinated with Manitoba Hydro.	<u>Agriculture</u>
14	Colony representatives indicated that diagonal routing was not a concern if it was pushed to the edge of their agricultural lands (follow creek and tree line)		<u>Routing</u>
15	Colony members indicated that the soil conditions on land owned is continually improving and that crops included grain as well as soy beans.		<u>Agriculture</u>
16	A colony member asked whether this project was guarenteed to go ahead.	MH representatives outlined the regulatory process for the project and discussed the existing and future power sales/exports into the US.	<u>Export</u>

17	Colony representative questioned the timelines for construction of the project.	it was outlined that construction would not occur until a Licence has been granted for the project. Noted that the ISD is 2020. Also discussed land easement acquisition and the process in which MH will approach each landowner to negotiate.	<u>Compensation</u>
18	The colony noted that they do not have large scale irrigation plans for the lands and that they only use aerial application if absolutely needed.		<u>Agriculture</u>
19	The colony indicated that their internet is done by receiver and would come from Vita.	It was outlined that if interference were to occur regarding internet from a tower, Manitoba Hydro would work with the landowners to address the issue.	<u>EMFs</u>
20	A colony member asked about noise from the transmission line and whether it can be heard from a distance	It was outlined that with final design and the development of the EIS that noise would be assessed. It is MH's intention to meet all municipal/provincial guidelines for noise.	<u>Noise</u>

Appendix C

C1 – Stakeholder Notification Letters

C2 – Landowner Notification Letters

C3 – POH Advertising

C4 – Email Campaign



820 Taylor Ave (3) • PO Box 7950 Stn Main Winnipeg Manitoba Canada • R3C 0J1
Telephone / N° de téléphone : 204-360-7888 or toll free 1-877-343-1631 • Fax / N° de télécopieur : 204-360-6176
mmtp@hydro.mb.ca

2015 01 16

[Name]
[Organization]
[Address]
[Town], [Province] [Postal Code]

Dear [Name]

PROPOSED MANITOBA-MINNESOTA TRANSMISSION PROJECT: ROUND 3 – PREFERRED ROUTE

Manitoba Hydro is proposing the construction of a 500-kilovolt alternating current transmission line in southeast Manitoba. Known as the Manitoba-Minnesota Transmission Project (MMTP), it is needed to support export sales to the United States and improve the reliability and security of electricity supply in emergency and drought situations in Manitoba. The MMTP will also increase access to markets in the United States for future export sales.

We have determined a preferred route for the Project based on feedback received throughout the public engagement and environmental assessment processes that have been undertaken. We have enclosed a project newsletter for additional information.

We will be holding various open houses in the vicinity of the preferred route as outlined in the enclosed schedule. We encourage you attend and to share this schedule with members of your organization.

Throughout Round 3, we will be collecting local knowledge, addressing concerns and answering questions to assist in the determination of a final route. Upon the completion of the environmental assessment, an Environmental Impact Statement will be filed with Manitoba Conservation and Water Stewardship in summer of 2015. At this point, the regulatory review process will begin with the provincial and federal governments.

Further information is available on the Project website, at www.hydro.mb.ca/mmtp. You can also provide your feedback, and get additional clarification or request a meeting by calling our toll-free information line at 1-877-343-1631 (in Winnipeg, dial 204-360-7888) or email us at mmtp@hydro.mb.ca

We thank you for your interest in the Project.

Yours truly,

Trevor Joyal
Environmental Specialist
Licensing & Environmental Assessment Dept
Transmission Planning & Design Division

TJ/kdc



820 Taylor Ave (3) • PO Box 7950 Stn Main Winnipeg Manitoba Canada • R3C 0J1
Telephone / N° de téléphone : 204-360-7888 or toll free 1-877-343-1631 • Fax / N° de télécopieur : 204-360-6176
mmtp@hydro.mb.ca

2015 01 16

[Name}
[Organization]
[Address]
[Town], [Province] [Postal Code]

Dear [Name]

PROPOSED MANITOBA-MINNESOTA TRANSMISSION PROJECT: ROUND 3 – PREFERRED ROUTE

Manitoba Hydro is proposing the construction of a 500-kilovolt alternating current transmission line in southeast Manitoba. Known as the Manitoba-Minnesota Transmission Project (MMTP), it is needed to support export sales to the United States and improve the reliability and security of electricity supply in emergency and drought situations in Manitoba. The MMTP will also increase access to markets in the United States for future export sales.

We have determined a preferred route for the Project based on feedback received throughout the public engagement and environmental assessment processes that have been undertaken. We have enclosed a project newsletter for your review.

Your organization has stated that they would like to meet with Manitoba Hydro representatives at key stages in the environmental assessment process. We will be contacting you in the near future to schedule a time to share project information, collect feedback and address questions or concerns your organization may have.

We will be holding various open houses in the vicinity of the preferred route as outlined in the enclosed schedule. We encourage you attend and to share this schedule with members of your organization.

Throughout Round 3, we will be collecting local knowledge, addressing concerns and answering questions to assist in the determination of a final route. Upon the completion of the environmental assessment, an Environmental Impact Statement will be filed with Manitoba Conservation and Water Stewardship in summer of 2015. At this point, the regulatory review process will begin with the provincial and federal governments.

If you would like more information, or are unable to meet with us, project information is available on the Project website, at www.hydro.mb.ca/mmtp. You can also provide your feedback, and get additional clarification on the Project by calling our toll-free information line at 1-877-343-1631 (in Winnipeg, dial 204-360-7888) or email us at mmtp@hydro.mb.ca

We look forward to meeting with you.

Yours truly,

Trevor Joyal
Environmental Specialist
Licensing & Environmental Assessment Dept
Transmission Planning & Design Division
TJ/kdc

Appendix C

C1 – Stakeholder Notification Letters

C2 – Landowner Notification Letters

C3 – POH Advertising

C4 – Email Campaign



820 Taylor Ave (3) • PO Box 7950 Stn Main Winnipeg Manitoba Canada • R3C 0J1
Telephone / N° de téléphone : 204-360-7888 or toll free 1-877-343-1631 • Fax / N° de télécopieur : 204-360-6176
mmtp@hydro.mb.ca

2015 01 20

«CUSTNAME»
«MAILADDR2» «MAILADDR3»
«MAILCITY», «MAILPROV» «MAILPOST»

Reference ID: ALO[XXXX]

Map Enclosed: [map]

Dear «CUSTNAME»

PROPOSED MANITOBA-MINNESOTA TRANSMISSION PROJECT: ROUND 3 – PREFERRED ROUTE

Manitoba Hydro is proposing the construction of a 500-kilovolt alternating current transmission line in southeast Manitoba. Known as the Manitoba-Minnesota Transmission Project (MMTP), it is needed to support export sales to the United States and improve the reliability and security of electricity supply in emergency and drought situations in Manitoba. The MMTP will also increase access to markets in the United States for future export sales.

We have determined a preferred route for the Project based on feedback received throughout the public engagement and environmental assessment processes that have been undertaken. **The preferred route is anticipated to cross land that you own.** A newsletter and map have been included in this package for your review. We would like to meet with you to answer questions, address concerns and discuss compensation. Information gathered throughout the public engagement process will assist in determining any final modifications to the transmission line.

Please review the enclosed document that outlines the locations & times when the Project team will be discussing the project with local landowners or contact us for further information.

Upon the completion of the environmental assessment, an Environmental Impact Statement will be filed with Manitoba Conservation and Water Stewardship in summer of 2015. At this point, the regulatory review process will begin with the provincial and federal governments.

We look forward to meeting with you.

Yours truly,

Trevor Joyal
Environmental Specialist
Licensing & Environmental Assessment Dept
Transmission Planning & Design Division

Madame, Monsieur,

PROJET DE TRANSMISSION MANITOBA – MINNESOTA : TROISIÈME SÉRIE DE CONSULTATIONS – TRACÉ PRÉFÉRÉ

Manitoba Hydro propose de construire dans le sud-est du Manitoba une ligne de transmission à courant alternatif (c.a.) de 500 kilovolts que l'on appelle Projet de transmission Manitoba – Minnesota. Le projet est nécessaire pour appuyer les ventes à l'exportation aux États-Unis et pour augmenter la fiabilité et la sécurité de l'alimentation en électricité en cas d'urgence ou de sécheresses au Manitoba. La nouvelle ligne augmentera aussi l'accès aux marchés des États-Unis pour les ventes à l'exportation futures.

Nous avons établi un tracé préféré pour le projet basé sur la rétroaction reçue dans le cadre des processus de dialogue avec le public et d'évaluation environnementale qui ont été réalisés. **Il est prévu que le tracé préféré passera sur une terre qui vous appartient.** Cette trousse comprend un bulletin et une carte aux fins d'examen. Nous aimerions vous rencontrer pour répondre à des questions et à des préoccupations et parler de dédommagement. Les renseignements recueillis tout au long du processus de dialogue avec le public aideront à l'établissement de toute modification finale à apporter à la ligne de transmission.

Veillez examiner le document ci-inclus qui indique où et quand l'équipe discutera du projet avec les propriétaires fonciers de la localité. Vous pouvez aussi communiquer avec nous pour plus de renseignements.

Une fois que l'évaluation environnementale sera terminée, un énoncé des incidences environnementales sera déposé auprès de Conservation et Gestion des ressources hydriques Manitoba à l'été de 2015. À ce moment-là, le processus d'examen réglementaire par les gouvernements fédéral et provincial débutera.

Nous avons hâte de vous rencontrer.

Veillez agréer, Madame, Monsieur, mes salutations distinguées.



Trevor Joyal
Spécialiste de l'environnement
Service de licences et d'évaluations environnementales
Planification et conception – Transmission



820 Taylor Ave (3) • PO Box 7950 Stn Main Winnipeg Manitoba Canada • R3C 0J1
Telephone / N° de téléphone : 204-360-7888 or toll free 1-877-343-1631 • Fax / N° de télécopieur : 204-360-6176
mmtp@hydro.mb.ca

2015 01 16

«CUSTNAME»
«MAILADDR2» «MAILADDR3»
«MAILCITY», «MAILPROV» «MAILPOST»

Reference ID: MLO[XXX]

Map Enclosed: [map]

Dear «CUSTNAME»

PROPOSED MANITOBA-MINNESOTA TRANSMISSION PROJECT: ROUND 3 – PREFERRED ROUTE

Manitoba Hydro is proposing the construction of a 500-kilovolt alternating current transmission line in southeast Manitoba. Known as the Manitoba-Minnesota Transmission Project (MMTP), it is needed to support export sales to the United States and improve the reliability and security of electricity supply in emergency and drought situations in Manitoba. The MMTP will also increase access to markets in the United States for future export sales.

We have determined a preferred route for the Project based on feedback received throughout the public engagement and environmental assessment processes that have been undertaken. **The preferred route is anticipated to be within one mile of land that you own.** A newsletter and map have been included in this package for additional information. We would like to meet with you to answer questions and address concerns. Information gathered throughout the public engagement process will assist in determining any final modifications to the transmission line.

Please review the enclosed document that outlines the locations & times when the Project team will be discussing the project with local landowners or contact us for further information.

Upon the completion of the environmental assessment, an Environmental Impact Statement will be filed with Manitoba Conservation and Water Stewardship in summer of 2015. At this point, the regulatory review process will begin with the provincial and federal governments.

We look forward to meeting with you.

Yours truly,

Trevor Joyal
Environmental Specialist
Licensing & Environmental Assessment Dept
Transmission Planning & Design Division

Madame, Monsieur,

PROJET DE TRANSMISSION MANITOBA – MINNESOTA : TROISIÈME SÉRIE DE CONSULTATIONS – TRACÉ PRÉFÉRÉ

Manitoba Hydro propose de construire dans le sud-est du Manitoba une ligne de transmission à courant alternatif (c.a.) de 500 kilovolts que l'on appelle Projet de transmission Manitoba – Minnesota. Le projet est nécessaire pour appuyer les ventes à l'exportation aux États-Unis et pour augmenter la fiabilité et la sécurité de l'alimentation en électricité en cas d'urgence ou de sécheresses au Manitoba. La nouvelle ligne augmentera aussi l'accès aux marchés des États-Unis pour les ventes à l'exportation futures.

Nous avons établi un tracé préféré pour le projet basé sur la rétroaction reçue dans le cadre des processus de dialogue avec le public et d'évaluation environnementale qui ont été réalisés. **Il est prévu que le tracé préféré se situera à moins de un mile d'une terre qui vous appartient.** Cette trousse comprend un bulletin et une carte aux fins d'examen. Nous aimerions vous rencontrer pour répondre à des questions et à des préoccupations. Les renseignements recueillis tout au long du processus de dialogue avec le public aideront à l'établissement de toute modification finale à apporter à la ligne de transmission.

Veillez examiner le document ci-inclus qui indique où et quand l'équipe discutera du projet avec les propriétaires fonciers de la localité. Vous pouvez aussi communiquer avec nous pour plus de renseignements.

Une fois que l'évaluation environnementale sera terminée, un énoncé des incidences environnementales sera déposé auprès de Conservation et Gestion des ressources hydriques Manitoba à l'été de 2015. À ce moment-là, le processus d'examen réglementaire par les gouvernements fédéral et provincial débutera.

Nous avons hâte de vous rencontrer.

Veillez agréer, Madame, Monsieur, mes salutations distinguées.



Trevor Joyal
Spécialiste de l'environnement
Service de licences et d'évaluations environnementales
Planification et conception – Transmission



820 Taylor Ave (3) • PO Box 7950 Stn Main Winnipeg Manitoba Canada • R3C 0J1
Telephone / N° de téléphone : 204-360-7888 or toll free 1-877-343-1631 • Fax / N° de télécopieur : 204-360-6176
mmtp@hydro.mb.ca

2015 03 31

Reference ID: ALO[XXXX]

«CUSTNAME»
«MAILADDR2» «MAILADDR3»
«MAILCITY», «MAILPROV» «MAILPOST»

Dear «CUSTNAME»

FOLLOW UP: PROPOSED MANITOBA-MINNESOTA TRANSMISSION PROJECT: ROUND 3 – PREFERRED ROUTE

We would like to follow up on a package sent by mail dated January 16, 2015 that presented the preferred route for the Manitoba-Minnesota Transmission Project. This package outlined that your property may be crossed by the proposed transmission line.

We have attempted to contact you by phone and letter and our records show that to date we have not had the opportunity to discuss the Project with you. We would like to speak directly with each potentially affected landowner and we encourage you to contact us by email or by phone (listed below).

Over the upcoming months we will continue to collect and review the information we have received through the public engagement process as well as the environmental assessment work that has been undertaken to determine the final placement of the transmission line. We will submit this final preferred route to Manitoba Conservation and Water Stewardship and the National Energy Board for their review.

We anticipate submitting the environmental impact statement and the final preferred route to regulators this summer. We will notify you again by letter upon submission to regulatory authorities. If you have not already signed up for email updates regarding the project, we encourage you to do so (www.hydro.mb.ca/mmtp).

If you would like to share your feedback, would like additional information or would like us to resend the initial package sent in January, please contact us.

We would like the opportunity to discuss the Project with you.

Thank you.

Yours truly,

Trevor Joyal
Environmental Specialist
Licensing & Environmental Assessment Dept
Transmission Planning & Design Division

Phone 1-877-343-1631

Email: mmtp@hydro.mb.ca

Website: www.hydro.mb.ca/mmtp

2015 03 31

N° de référence : ALO[001]

Madame, Monsieur, -

SUIVI : PROJET DE TRANSMISSION MANITOBA – MINNESOTA : TROISIÈME SÉRIE DE CONSULTATIONS – TRACÉ PRÉFÉRÉ

Nous aimerions faire le suivi de l'envoi postal du 16 janvier 2015 qui présentait le tracé préféré dans le cadre du Projet de transmission Manitoba – Minnesota. Les documents indiquaient la possibilité que la ligne de transmission proposée passe sur votre propriété.

Nous avons essayé de communiquer avec vous par téléphone et par la poste, et nos dossiers indiquent que jusqu'à présent, nous n'avons pas eu l'occasion de discuter du projet avec vous. Nous aimerions parler directement avec chacun des propriétaires fonciers potentiellement touchés par le projet, et nous vous encourageons à communiquer avec nous par courrier électronique ou par téléphone (voir ci-dessous).

Au cours des mois à venir, nous continuerons de recueillir et d'examiner les renseignements reçus dans le cadre du processus de dialogue avec le public, et découlant des travaux effectués pour l'évaluation environnementale en vue d'établir le tracé final de la ligne de transmission. Nous soumettrons le tracé final préféré à Conservation et Gestion des ressources hydriques Manitoba, et à l'Office national de l'énergie aux fins d'examen.

Nous prévoyons déposer l'énoncé des incidences environnementales et le tracé final préféré auprès des organismes de réglementation cet été. Nous vous aviserons à nouveau par courrier au moment de la soumission aux organismes de réglementation. Si vous ne vous êtes pas encore inscrit pour recevoir des courriels de mise à jour concernant le projet, nous vous encourageons à le faire (www.hydro.mb.ca/mmtp).

Si vous aimeriez communiquer une rétroaction ou recevoir plus de renseignements, ou si vous aimeriez que nous vous fassions parvenir à nouveau les documents initiaux envoyés en janvier, veuillez communiquer avec nous.

Nous aimerions avoir la possibilité de discuter du projet avec vous. Merci.

Veuillez agréer, Madame, Monsieur, mes salutations distinguées.



Trevor Joyal
Spécialiste de l'environnement
Service de licences et d'évaluations environnementales
Planification et conception – Transmission

Manitoba-Minnesota Transmission Project Public Engagement Activities

January 2015

Manitoba Hydro will be in communities in the proximity of the preferred route for the Manitoba – Minnesota Transmission Project to discuss the project with local landowners.

If attending in person, please bring this entire package of materials with you.

Venues are being held for landowners located within one mile of the project and will offer one-on-one discussions with Manitoba Hydro representatives regarding project questions or concerns you may have. These venues will offer more in-depth discussion than an open house setting and are not being advertised to the broader public. The sessions will have a drop-in format but if you would like to make an appointment with us, please phone **1-877-343-1631**.

Venues for Landowners within one mile of the Preferred Route Only

Community	Dates	Time	Location
La Broquerie	February 18	3 to 8 p.m.	La Broquerie Arena 35 Normandeu Bay
La Broquerie	February 19	3 to 8 p.m.	La Broquerie Arena 35 Normandeu Bay
La Broquerie	February 21	12 to 4 p.m.	La Broquerie Arena 35 Normandeu Bay
Ste. Anne	February 25	3 to 8 p.m.	Seine River Banquet Centre 80A Arena Rd.
Ste. Anne	February 26	3 to 8 p.m.	Seine River Banquet Centre 80A Arena Rd.
Ste. Anne	February 28	12 to 4 p.m.	Seine River Banquet Centre 80A Arena Rd.

You are also welcome to attend any of the following open houses. (Each will offer the same information.)
 If you are unable to attend, please contact us by phone (1-877-343-1631) or email (mmt@hydro.mb.ca) for more project information or to schedule a meeting time with a member of the Project team.

Public venues - open to all

Community	Dates	Time	Location
Zhoda	February 10	3 to 8 p.m.	Zhoda Community Centre Corner of Road No. 16 & Balla Road
Piney	February 11	3 to 8 p.m.	Piney Community Centre Hwy. 89 (Main Street)
Winnipeg	February 12	3 to 8 p.m.	Holiday Inn South 1300 Pembina Hwy.
La Broquerie	February 17	3 to 8 p.m.	La Broquerie Arena 35 Normandeu Bay
Ste. Anne	February 24	3 to 8 p.m.	Seine River Banquet Centre 80A Arena Rd.
Headingley	March 4	3 to 8 p.m.	Headingley Community Centre 5353 Portage Ave.
Oak Bluff	March 5	3 to 8 p.m.	Oak Bluff Recreation Centre 101 MacDonald Rd.
Richer	March 11	3 to 8 p.m.	Richer Young at Heart Community Centre Dawson Road at Hwy. 302
Dugald	March 12	3 to 8 p.m.	Dugald Community Club 544 Holland St.

Thank you for taking the time to provide your feedback.

You can complete this questionnaire online at www.hydro.mb.ca/mmt
 or provide your feedback by email at mmt@hydro.mb.ca

Appendix C

C1 – Stakeholder Notification Letters

C2 – Landowner Notification Letters

C3 – POH Advertising

C4 – Email Campaign

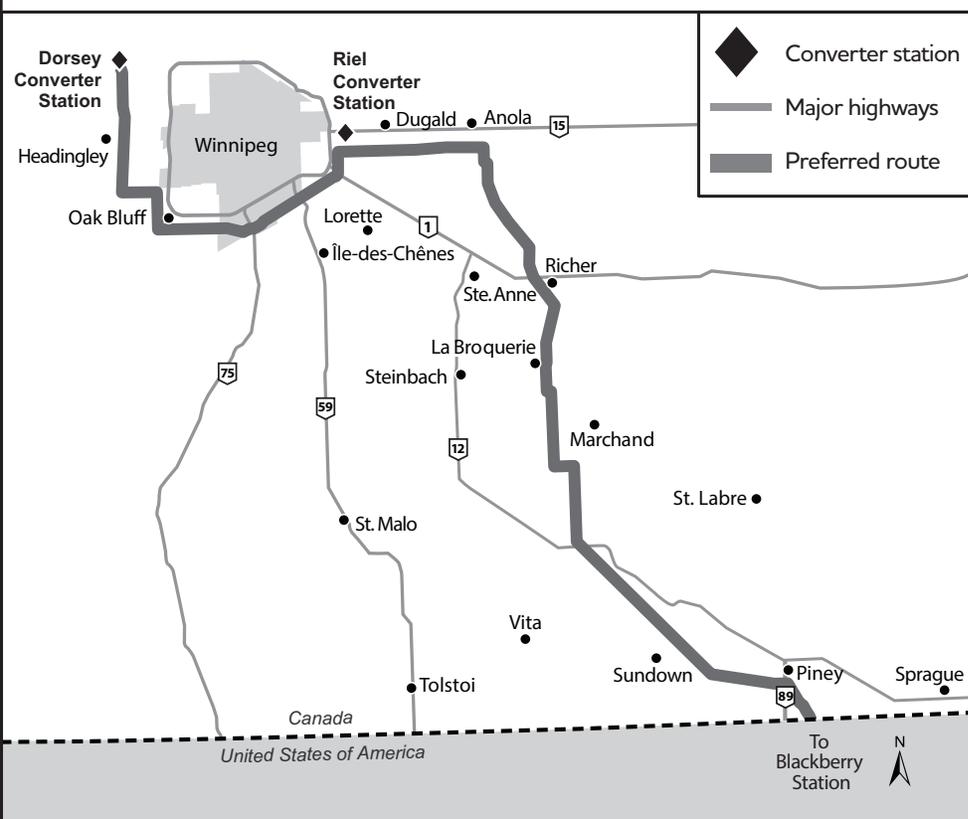
We want to hear from you.

Manitoba-Minnesota Transmission Project

Manitoba Hydro is proposing to construct a 500-kilovolt transmission line from Winnipeg to Minnesota to sell surplus power and enhance the reliability of supply in Manitoba in times of drought or emergency.

With the environmental assessment and public feedback received to date, **Manitoba Hydro is presenting the preferred route for review.**

Open houses will be held at the locations listed to the right. All are welcome and refreshments will be served.



Find more project information or sign up for project email updates at:
www.hydro.mb.ca/mntp

You can also phone **1-877-343-1631** or email mntp@hydro.mb.ca

RE-POWERING Our Province

Zhoda

Tuesday, February 10, 3 to 8 p.m.
Zhoda Community Centre
Corner of Road No. 16 & Balla Road

Piney

Wednesday, February 11, 3 to 8 p.m.
Piney Community Centre
Hwy. 89 (Main Street)

Winnipeg

Thursday, February 12, 3 to 8 p.m.
Holiday Inn Winnipeg South
1330 Pembina Hwy.

La Broquerie

Tuesday, February 17, 3 to 8 p.m.
La Broquerie Arena Hall
35 Normandeau Bay

Ste. Anne

Tuesday, February 24, 3 to 8 p.m.
Seine River Banquet Centre
80A Arena Rd.

Headingley

Wednesday, March 4, 3 to 8 p.m.
Headingley Community Centre
5353 Portage Ave.

Oak Bluff

Thursday, March 5, 3 to 8 p.m.
Oak Bluff Recreation Centre
101 MacDonald Rd.

Richer

Wednesday, March 11, 3 to 8 p.m.
Richer Young at Heart Community Club
Dawson Road at Hwy. 302

Dugald

Thursday, March 12, 3 to 8 p.m.
Dugald Community Club
544 Holland St.

 **Manitoba
Hydro**

We want to hear from you.

Manitoba-Minnesota Transmission Project

Manitoba Hydro is proposing to construct a 500-kilovolt transmission line from Winnipeg to Minnesota to sell surplus power and enhance the reliability of supply in Manitoba in times of drought or emergency.

With the environmental assessment and public feedback received to date, **Manitoba Hydro is presenting the preferred route for review.**

You are invited to drop by any open house listed below. We will be collecting local knowledge, answering questions and addressing concerns to assist in the finalization of the preferred route.

All are welcome and refreshments will be served.

Zhoda

Tuesday, February 10
3 to 8 p.m.
Zhoda Community Centre
Corner of Road No. 16
& Balla Road

Mardi 10 février
15 h à 20 h
Centre communautaire de Zhoda
Angle de la route 16 et
du ch. Balla

Piney

Wednesday, February 11
3 to 8 p.m.
Piney Community Centre
Hwy. 89 (Main Street)

Mercredi 11 février
15 h à 20 h
Centre communautaire
de Piney
Route 89 (rue Main)

Winnipeg

Thursday, February 12
3 to 8 p.m.
Holiday Inn Winnipeg South
1330 Pembina Hwy.

Jeudi 12 février
15 h à 20 h
Holiday Inn Winnipeg South
1330, chemin Pembina

La Broquerie

Tuesday, February 17
3 to 8 p.m.
La Broquerie Arena Hall
35 Normandeau Bay

Mardi 17 février
15 h à 20 h
Salle de l'Aréna de La Broquerie
35, baie Normandeau

Ste. Anne

Tuesday, February 24
3 to 8 p.m.
Seine River Banquet Centre
80A Arena Rd.

Mardi 24 février
15 h à 20 h
Salle de réception Rivière Seine
80-A, ch. Arena

Nous voulons vous entendre.

Projet de transmission Manitoba – Minnesota

Manitoba Hydro propose de construire une ligne de transmission de 500 kilovolts entre Winnipeg et le Minnesota pour vendre son surplus d'énergie et augmenter la fiabilité de l'alimentation au Manitoba pendant les périodes de sécheresse ou en cas d'urgence.

Munie de l'évaluation environnementale et de la rétroaction du public reçue jusqu'à présent, **Manitoba Hydro présentera le tracé préféré aux fins d'examen.**

Nous vous invitons à participer à l'une ou l'autre des journées portes ouvertes pour examiner le projet. Nous recueillerons des connaissances locales et nous répondrons à des questions et à des préoccupations en vue d'aider à finaliser le tracé préféré.

Les journées portes ouvertes se dérouleront de 15 h à 20 h aux endroits énumérés ci-dessous. Des rafraîchissements seront servis.

Headingley

Wednesday, March 4
3 to 8 p.m.
Headingley Community Centre
5353 Portage Ave.

Mercredi 4 mars
15 h à 20 h
Centre communautaire
de Headingley
5353, av. Portage

Oak Bluff

Thursday, March 5
3 to 8 p.m.
Oak Bluff Recreation Centre
101 MacDonald Rd.

Jeudi 5 mars
15 h à 20 h
Centre récréatif d'Oak Bluff
101, ch. MacDonald

Richer

Wednesday, March 11
3 to 8 p.m.
Richer Young at Heart
Community Club
Dawson Road at Hwy, 302

Mercredi 11 mars
15 h à 20 h
Richer Young at Heart
Community Club
Angle du ch. Dawson et
de la route 302

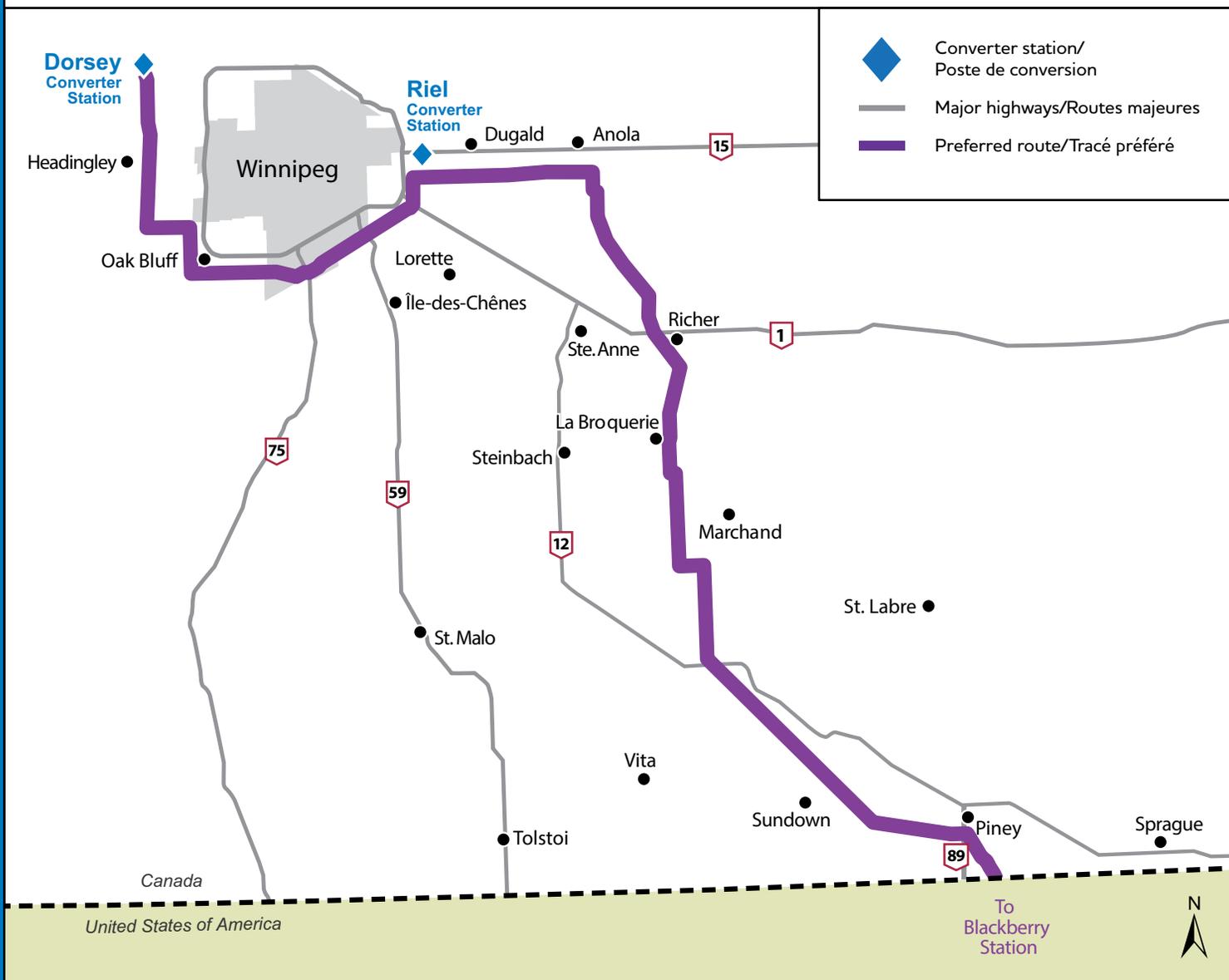
Dugald

Thursday, March 12
3 to 8 p.m.
Dugald Community Club
544 Holland St.

Jeudi 12 mars
15 h à 20 h
Club communautaire
de Dugald
544, rue Holland

Preferred route

Tracé préféré



Detailed preferred route maps and materials will be presented at the open houses and also posted on our website.

Find more project information or sign up for project email updates:

- visit www.hydro.mb.ca/mntp;
- phone **1-877-343-1631**;
- email mmtp@hydro.mb.ca

Les cartes détaillées et le matériel sur le tracé préféré qui seront présentés lors des journées portes ouvertes seront également publiés sur notre site Web.

Pour plus de renseignements sur le projet et sur comment vous inscrire pour recevoir par courriel des mises à jour sur le projet :

en ligne : www.hydro.mb.ca/mntp
téléphone : **1 877 343-1631**
courriel : mmtp@hydro.mb.ca

Appendix C

C1 – Stakeholder Notification Letters

C2 – Landowner Notification Letters

C3 – POH Advertising

C4 – Email Campaign



[View this email as a web page.](#)



Manitoba-Minnesota Transmission Project

Round 3 Online Survey has now Closed

We would like to thank all of those who took time to provide feedback to the Project Team.

Feedback that has been received will enhance the environmental assessment and will be considered in determining the final placement of the transmission line.

Next Steps

We will be determining the final placement of the transmission line and completing the Environmental Impact Statement that is anticipated to be submitted to both Provincial and Federal Regulators this summer.

Once filed with Regulators, the public is able to review the Environmental Impact Statement and provide comments for consideration in their licensing decision. Please watch your email for ongoing notices from the Project Team.

[Learn more about the regulatory review process.](#)

Feedback can still be Provided

The Project information phone line and email address are available to any interested individual who would like information or provide feedback regarding the Project.

Email: mmtp@hydro.mb.ca

Information Line (toll free): 1-877-343-1631

[For more information on the Project visit the Project website.](#)

To ensure our email always reaches your inbox, add info@mbhydromail.ca to your address book. This email was intended for _____. To stop this email subscription, [unsubscribe here](#).

Contact us at customerservice@hydro.mb.ca or call toll-free at 1-888-624-9376.

Manitoba Hydro, 360 Portage Avenue, Winnipeg, MB R3C 0G8
204-480-5900 | www.hydro.mb.ca

© Manitoba Hydro. All rights reserved.

Appendix D

D1 – Public Open House Story
Boards and Handouts

D2 – Sample Comment Sheet

D3 – Sample Landowner Form

Public Open House Manitoba - Minnesota Transmission Project

Welcome



Purpose of the Open House

- Provide information about the project.
- Gather feedback on the preferred route.
- Gather information to enhance the environmental assessment work being undertaken.
- Gather local knowledge to assist in determining the final placement of the transmission line.
- Discuss possible mitigation measures to minimize potential impacts.
- Answer questions and address concerns.



Project Need

The Manitoba-Minnesota Transmission Project is needed to:

- Export electric power based on current sales agreements;
- Improve reliability and import capacity in emergency and drought situations;
- Increase Manitoba Hydro access to markets in the United States.



Why does Manitoba export and import power?

- In 2012–13 Manitoba Hydro export sales totaled \$353 million with 88 per cent derived from sales in the U.S. market, and 12 per cent from Canadian markets.
- Manitoba Hydro’s utility customers in the United States want long-term price certainty and stability. These utilities see value in purchasing hydroelectricity through long-term fixed contracts that are not linked to volatile natural gas prices and will not be subject to future changes in regulatory requirements associated with air emissions.



Project Description

- **The Manitoba-Minnesota Transmission Project includes:**
 - construction of a 500-kV AC transmission line in southeastern Manitoba
 - upgrades to associated stations at Dorsey, Riel, and Glenboro
- **The transmission line will travel to the preferred border crossing located south of Piney.**
- **The project will connect at the Minnesota border to the Great Northern Transmission Line, constructed by Minnesota Power.**
- **Anticipated in-service date is 2020.**
- **Estimated cost is \$350 million.**



Station Modifications

Dorsey & Riel Converter stations

- Upgrades (equipment) needed to accommodate the 500 -kV AC line;
- Most upgrades will be undertaken within fenced area of both stations.

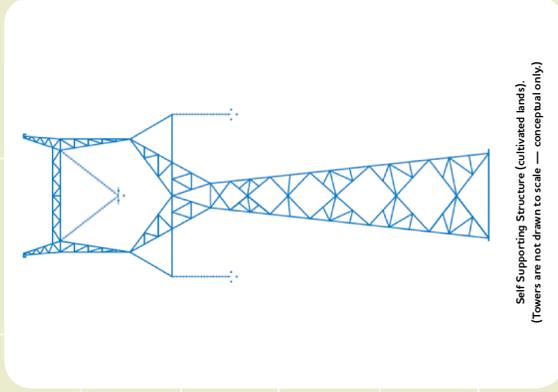


Glenboro station

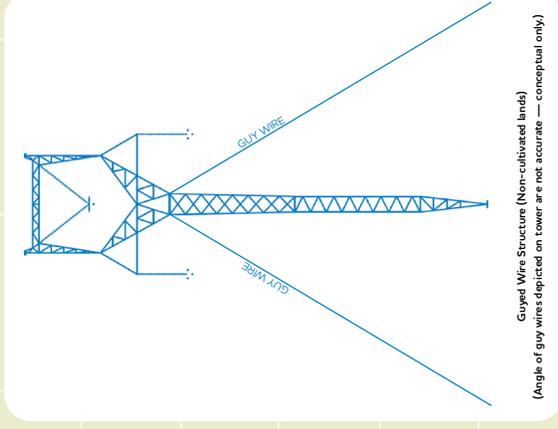
- Station expansion needed (east);
- Equipment upgrades;
- Current terminus of an existing import/export line;
- Tower relocation will be necessary;
- Engagement process being undertaken with local residents to explain the expansion and address any concerns.



Preliminary Tower Design



- **Steel lattice towers:**
 - Self-supporting towers in cultivated agricultural areas;
 - Guyed structures will be used in all other terrain.
- **Current design anticipates:**
 - range from 40 to 60 m (130 to 200 ft) in height.
 - average span of 400 to 500 m (1300 to 1650 ft) apart.
 - utilize a right-of-way width of 80 to 100 m (260 to 330 ft).



Self Supporting Structure (cultivated lands).
(Towers are not drawn to scale — conceptual only)

Guyed Wire Structure (Non-cultivated lands)
(Angle of guy wires depicted on tower are not accurate — conceptual only)

Regulatory

- **The Manitoba-Minnesota Transmission Project is subject to environmental regulatory review and approval, including:**
 - Authorization of an international power line, which is required under the *National Energy Board (NEB) Act*;
 - Environmental assessment by NEB under the *Canadian Environmental Assessment Act, 2012*;
 - Reviewing and licensing by Manitoba Conservation and Water Stewardship under *The Environment Act (Manitoba)*; and
 - Under the direction of the Minister, the Clean Environment Commission may hold a public hearing.

For more information, visit www.hydro.mb.ca/mmtp or speak with a Manitoba Hydro representative.

Environmental Assessment

- Construction of the proposed transmission line will require a Class 3 License under *The Environment Act* (Manitoba).
- The Environmental Impact Statement (EIS) for the project will include:
 - Study area characterization;
 - Public engagement program;
 - Assessment of potential environmental and socio-economic effects;
 - Assessment of cumulative effects;
 - Mitigation measures and monitoring plans; and
 - An environmental protection program.

For more information, visit www.hydro.mb.ca/mmtp or speak with a Manitoba Hydro representative.



Engagement Process

Round 1:

October to November 2013

- Introduce the Project.
- Present alternative routes and proposed border crossings.
- Answer questions.
- Identify and document concerns.
- Use input to guide route refinement & preferred border crossing selection.

Round 2:

April to August 2014

- Present what we heard in Round 1.
- Present refined alternative routes to preferred border crossing.
- Answer questions.
- Identify and document concerns.
- Use input to guide preferred route selection.

Round 3:

January to April 2015

- Present what we heard in Round 2.
- Present the preferred route.
- Answer questions.
- Identify and document outstanding concerns.
- Discuss potential effects and possible mitigation measures to minimize effects.
- Use input to assist in determining final route placement.

Project Timelines

	2013	2014	2015	2016	2017	2018	2019	2020
Round 1 – Alternative routes and border crossings	█							
Round 2 – Preferred border crossing to refined alternative routes		█						
Round 3 – Preferred route			█					
EIS filing			█					
Regulatory review				█				
Anticipated License decision					█			
Construction						█	█	
In-service date								█

Next Steps

- Review input from the public engagement and the environmental assessment processes.
- Determine a Final Preferred Route.
- Complete the Environmental Assessment for the Final Preferred Route and develop the environmental impact statement (EIS).
- Submit EIS to regulators in Summer of 2015.
- Continue to answer questions and address concerns.

Preferred Route Selection Process



Routing Process is based on the EPRI-GTC methodology. For more information please visit the project website at www.hydro.mb.ca/mmtp or speak with a Manitoba Hydro representative.



The project team wants to hear from you!

- Manitoba Hydro representatives are available to answer your questions.
- Please take a moment to complete a comment sheet so the project team can document your concerns.
- You can also visit a map station to show us where you may have any information or additional considerations regarding the alternative routes.
- Complete a survey online.



The project team wants to hear from you!

- **Please contact:**
Licensing & Environmental Assessment Department
Toll Free: 1-877-343-1631
In Winnipeg: 204-360-7888
Email: mmtp@hydro.mb.ca
- Visit the project webpage at www.hydro.mb.ca/mmtp for up-to-date information, and register to receive project updates
- Display boards and project material are also available on the project webpage.



Thank you for attending and providing your feedback!



Can AC electric and magnetic fields cause audible noise or radio/television interference?

Possibly, effects on amplitude-modulated (AM) radio stations may be noticeable, particularly when crossing underneath a transmission line. Effects may also be noticeable when viewing television stations that still broadcast with analog signals outside major population areas, particularly when one is both very close to a transmission line and far from the broadcasting station. Frequency-modulated (FM) radio stations, cable television, and television stations that broadcast with digital signals are rarely affected. Adherence to Canada's and Manitoba's electrical codes and standards will minimize possible effects.

For more information, please visit the following websites:

Canada

Health Canada

<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/magnet-eng.php>

BC Centre for Disease Control

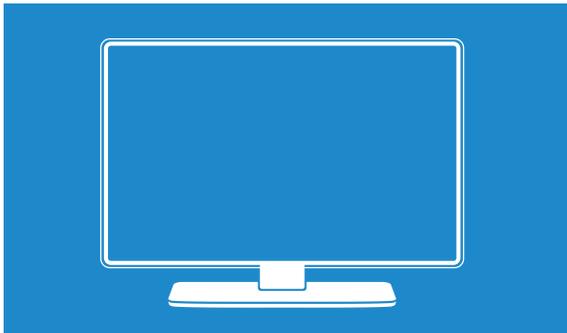
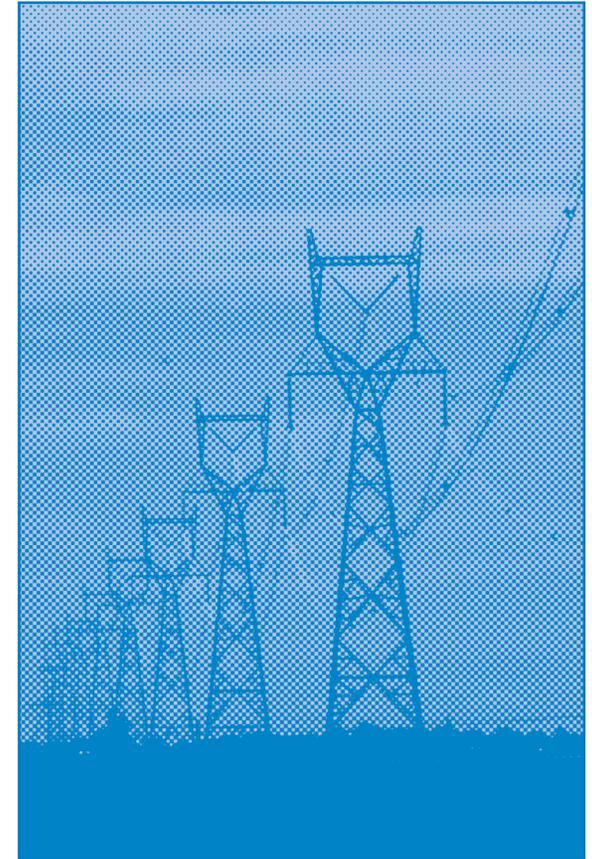
<http://www.bccdc.ca/NR/rdonlyres/E1B06155-6B2A-419E-95C0-3CA6A0F-A17BF/0/R1N01.pdf>

International

World Health Organization

<http://who.int/peh-emf/about/en/>

Alternating Current Electric and Magnetic Fields



This brochure was created by epidemiologists and biological scientists in the Health Sciences Practice of Exponent, a leading firm in scientific and engineering disciplines. ©October 2013.

Exponent
Engineering and Scientific Consulting

 **Manitoba
Hydro**

Manitoba Hydro is a crown corporation that generates and distributes electricity to customers in Manitoba. This electric system and any device connected to it produces alternating current (AC) electric and magnetic fields (EMF) that oscillate at a frequency of 60 Hertz (Hz).

This brochure describes EMF, the health research that has been conducted, and the conclusions offered by various scientific agencies on AC EMF and effects on human health.

What are AC electric and magnetic fields?

Manitoba Hydro's electric system carries power from generating stations to customer's homes by way of transmission lines, substations and distribution lines. Each component of this system — from the transmission lines that carry the electricity to the appliances that use the electricity — produces EMF in the extremely low frequency range that includes 60 Hz.^[1] In scientific terms, a field describes the properties of space surrounding an object due to the characteristics of the object. A temperature field, for example, surrounds a warm object, just as both electric fields and magnetic fields surround electrical objects.

What do health and scientific agencies say about EMF?

In the past 35 years, several thousand research studies have investigated the potential health effects of EMF in human populations, laboratory animals and cells. Numerous scientific and health agencies have evaluated this body of research, including the World Health Organization, the International Agency for Research on Cancer and Public Health England.^[2] In Canada, the topic has been evaluated by the Federal Provincial Territorial Radiation Protection Committee (FPTRPC). The FPTRPC is an intergovernmental Canadian committee assembled to harmonize the standards and practices for extremely low frequency EMF

within federal, provincial and territorial jurisdictions. Health Canada refers to the FPTRPC as the authority on issues related to EMF. The FPTRPC established an extremely low frequency working group to carry out periodic reviews, to recommend appropriate actions and to provide position statements that reflect the common opinion of intergovernmental agencies.

The conclusion of these scientific agencies has been generally consistent. Overall, they concluded that the research does not show that either electric fields or magnetic fields are a known or likely cause of any disease, including cancer. They also concluded that while some statistical data suggests a relationship between childhood leukemia and rare exposure to high average magnetic field levels, the uncertainty associated with these findings and the lack of support from experimental studies does not support a true causal relationship. Please see the end of this brochure for additional sources that provide more details about these agencies' conclusions

What are the specific conclusions of agencies in Manitoba and Canada?

The FPTRPC concluded "...there is insufficient scientific evidence showing exposure to EMFs from power lines can cause adverse health effects such as cancer." (See www.hc-sc.gc.ca/ewh-semt/radiation/fpt-radprotect/emf-cem-eng.php for more.) Also, the Manitoba Clean Environment Commission recently concluded that while "...some Manitobans are concerned about theories that EMFs from transmission lines can be harmful, ultimately decisions need to be made on the basis of international scientific consensus, and the scientific consensus is that there is no evidence for these concerns about EMFs."

Are there any standards or guidelines to limit exposure to AC EMF in Canada?

Canada does not have any national, territorial, or provincial standards or guidelines related to extremely low frequency EMF.

What does Health Canada recommend?

Health Canada states, "You do not need to take action regarding typical daily exposures to electric and magnetic fields at extremely low frequencies. There is no conclusive evidence of any harm caused by exposures at levels normally found in Canadian living and working environments."

Do AC electric and magnetic fields affect animals and plants?

Numerous research programs have been created to study the effects of extremely low frequency EMF on wild and domesticated animals; the largest of these research programs was conducted at McGill University in Quebec. Overall, this research has not found any relationship between EMF and the health, behaviour, or productivity of animals, including cows, pigs and sheep. Furthermore, studies of crops and other plants have reported no adverse effects on growth or viability.

^[1] Extremely low frequency EMF is different than radio frequency fields, such as those produced by mobile phones and radio and TV stations.

^[2] Public Health England is the successor agency to the National Radiological Protection Board and the Health Protection Agency.

GPS Use in Agriculture

As described, radio noise from an AC transmission line would not be expected to directly affect GPS receivers used for farming or other operations from receiving GPS signals or the satellite- or antenna-based correction signals.

Since real-time kinematic correction signals are transmitted from antennas that are typically only a few metres high, AC transmission line towers are not expected to produce much blocking of the line of sight signals from these sources either. Repositioning of the real-time kinematic base station antenna should resolve any issues if they occur.

Signal degradation can occur due to reflections from a nearby flat-topped building or other reflecting surfaces (such as lakes). The overall performance of a GPS guidance system in agriculture depends upon a high-quality receiver and good positional correction from an independent source.

Studies of the performance of vehicle mounted receivers using GPS and Russian Global Navigation Satellite signals around AC transmission lines in Manitoba have not reported any problems in obtaining positional signals with centimetre accuracy with satellite or real-time kinematic error corrections signals ^[14].

For more information on AC lines and electronic devices, please consult the references listed on the next panel.

References Cited

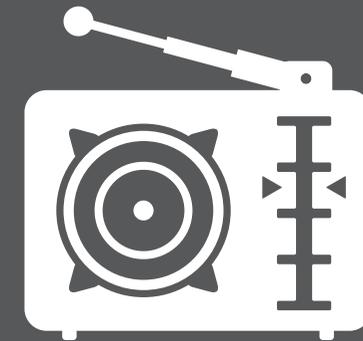
- [1] ARINC Incorporated for US Department of Transportation, Federal Highway Administration, "NDGPS Assessment Final Report." http://www.navcen.uscg.gov/pdf/ndgps/ndgps%20assessment%20report_final.pdf
- [2] National Space Based Positioning, Navigation and Timing Coordination Office. "Global Positioning System Augmentations." <http://www.gps.gov/systems/augmentations>
- [3] Silva JM and Olsen RG. "Use of global positioning (GPS) receivers under power-line conductors." IEEE Trans Power Del 17:938-944, 2002.
- [4] Silva JM. "Evaluation of the potential for power line noise to degrade real time differential GPS messages broadcast at 283.5-325 kHz." IEEE Trans Power Del 17:326-333, 2002.
- [5] Global Positioning System Standard Positioning Service Performance Standard, 4th Edition, September 2008. <http://pnt.gov/public/docs/2008/spsps2008.pdf>
- [6] Department of Transportation, "Global Positioning System Wide Area Augmentation System Performance Standard. US Department of Transportation and Federal Aviation Administration." October 31, 2008. <http://pnt.gov/public/docs/2008/waasps2008.pdf>
- [7] OmniSTAR, "OmniSTAR: The Global Positioning System." <http://www.omnistar.com/>
- [8] John Deere USA/Canada, "GPS & Troubleshooting: Receivers – Radio Interference." http://www.deere.com/en_US/ag/servicesupport/tips/agmanagementsolutions/AMS-receivers-radio-interference.html#
- [9] Natural Resources Canada Publication, "CDGPS Service Decommissioning Agreement – March 5, 2010." http://www.cdgps.com/e/dcgps_documents/CDGPS_Exit_Announcement.pdf
- [10] Natural Resources Canada Publication, "CDGPS – Canada-wide DGPS Service: Quality Real Time GPS Positioning." <http://www.geod.nrcan.gc.ca/publications/papers/pdf/cdgpsquality.pdf>
- [11] Research and Innovative Technology Administration, "Nationwide Differential Global Positioning System – Capabilities and Potential." [http://www.cavcen.uscg.gov/pdf/cgsic-meetings/49/Reports/\[31\]NDGPS_Update_CGSIC_St_092309.pdf](http://www.cavcen.uscg.gov/pdf/cgsic-meetings/49/Reports/[31]NDGPS_Update_CGSIC_St_092309.pdf)
- [12] John Deere Ag Management Solutions, "StarFire RTK 900 and 450 MHz Radio Operator's Manual." http://stellarsupport.deere.com/en_US/support/pdf/om/en/omfp10352.pdf
- [13] Transmission Line Reference Book, HVDC to ± 600 kV based on HVDC Transmission Research Project PR 104, sponsored by the Electric Power Research Institute and the Bonneville Power Administration. Vancouver, Washington: Bonneville Power Administration, 1976.
- [14] Pollock & Wright. "Effects of Transmission Lines on Global Positioning Systems," and PLAN Group, "Manitoba Hydro DC-Line GNSS Survey Report," November 2011. (http://www.hydro.mb.ca/projects/bipoleIII/eis/BPIII_GPS_Reports_November%202011.pdf.)

Prepared by Exponent © 2013 for Manitoba Hydro.

Exponent
Engineering and Scientific Consulting

AC Lines and Electronic Devices

GPS



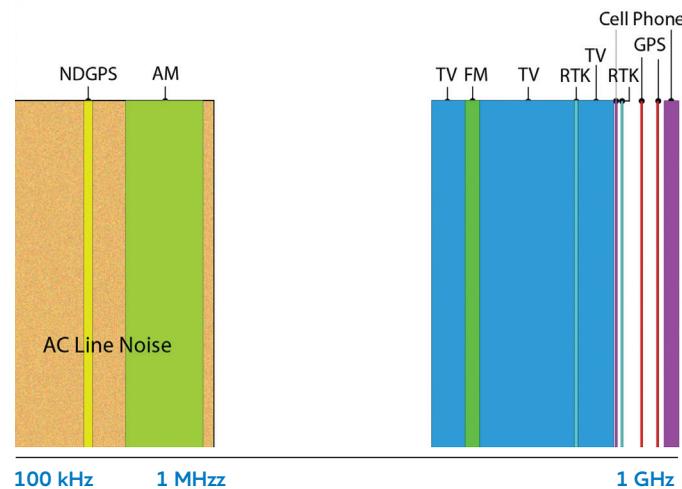
 **Manitoba
Hydro**

Manitoba Hydro distributes electricity throughout the province using alternating current (AC) transmission lines operating at voltages between 66-kilovolts (kV) and 500-kV. This brochure outlines information about electronic devices including global positioning system (GPS) receivers, radios, TVs, wireless internet and cell phones in the presence of AC transmission lines.

GPS receivers, radios, TVs, wireless internet, and cell phones all receive radio frequency signals. While radio and TV transmitters produce relatively strong radio frequency signals, GPS satellites, computers and transmission lines produce weaker radio frequency signals.

Radio and TV Receivers

Radio and TV interference may be noticeable when near an AC transmission line. Many people have heard interference while listening to amplitude-modulated (AM) radio stations and driving under power lines, particularly high voltage transmission lines. Interference to AM signals is caused by corona discharge around the transmission line conductors. This corona discharge generates broadband radio noise over a range of radio 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).



The illustration above represents the frequency band of radio signals from electronic devices such as TVs, cell phones, and GPS superimposed with the primary frequency range of radio noise from an AC transmission line.

TVs receiving digital television signals are not susceptible to this source of interference.

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

Cell Phones

Cell phones receive and transmit radio frequency signals at frequencies ranging from 850 megahertz (MHz) to 2,150 MHz. Radio noise from an AC transmission line does not overlap with the signals from a cell phone and, therefore, does not interfere with a phone's functioning near an AC transmission line.

Wireless Internet

Wireless internet operates at a frequency of 2,400 MHz. Radio noise from an AC transmission line does not overlap with wireless internet signals and, therefore, does not affect wireless internet function near an AC transmission line.

Global Positioning System Receivers

GPS is a space-based navigation system that relies on orbiting satellites circling Earth to establish the position of a GPS receiver. The receiver uses the radio frequency signals sent from three or more of these satellites to determine its exact location.

Naturally-occurring sources of radio frequency such as geomagnetic storms and man-made sources of radio frequency such as TV transmitters are sometimes reported to interfere with GPS signals because these sources produce interference in the same frequency range as the GPS satellite's signals.

Since GPS signals are of far higher frequency than the radio noise from an AC transmission line, it is very unlikely that an AC transmission line will interfere with GPS functioning.

Systems to Improve GPS Accuracy

Modern GPS receivers can receive corrections from a number of satellite-based systems with frequencies above 1 gigahertz to improve the accuracy of positional location; this is called differential GPS (DGPS).^[1-3, 5-12] Nationwide Differential GPS (NDGPS) is a GPS system used in the United States and along the southern border of

Canada that was developed to improve GPS accuracy when GPS first became available.^[1] This system, as well as the Canadian System GPS-C (now decommissioned) make use of land-based antennas to transmit correction signals to GPS receivers at lower frequencies, but are no longer used, particularly for high-precision applications.

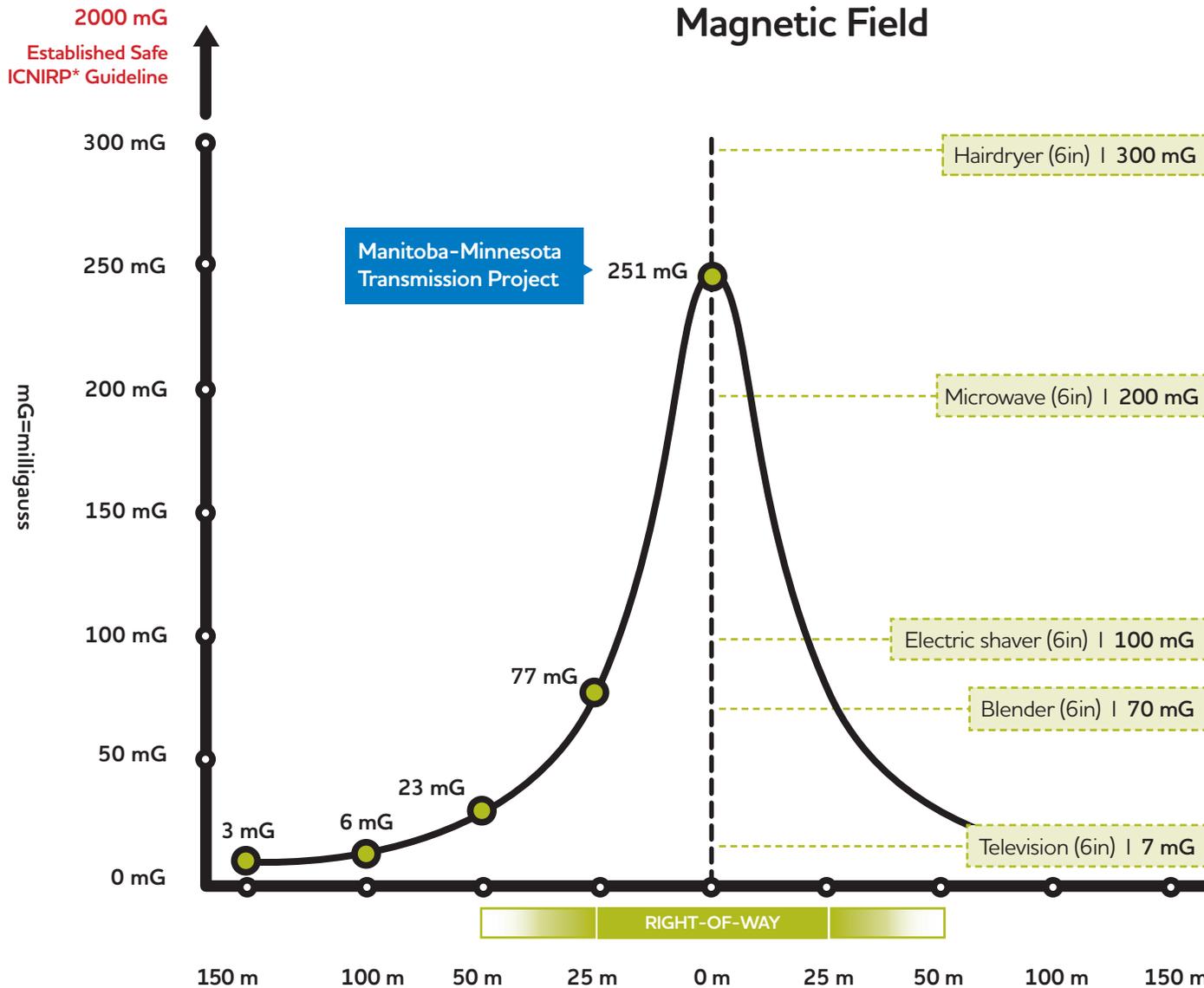
Some GPS systems also make use of real-time kinematic (RTK) systems to improve the accuracy of the GPS system by making use of the ultra-high frequency radio communication range.^[1, 12] Since the frequency bands of these systems are far higher than the radio noise frequencies produced by an AC transmission line, signal interference is unlikely to occur.^[3, 13] It is possible, however, that some receiver designs may be susceptible to minor interference to the receiver, not the GPS signal due to certain related factors. Conceptually, an AC transmission line might affect GPS performance by signal blocking and reflection.

Signal Blocking and Reflection

RF signals can be blocked by physical objects such as mountains or degraded by reflections off large solid objects. Reflections of GPS signals by buildings, lakes, and ponds can affect the accuracy of GPS positions. The towers of an AC transmission line, while relatively large compared to the size of a person for example, do not have a large footprint and they are not solid structures. So while the towers can result in some reflections and blocking of radio frequency signals, their impact is generally momentary and insignificant. Transmission line conductors also are too thin to block or cause large reflections of radio frequency signals.^[3, 4]

GPS and related receivers are typically configured to reduce the effects of blocked and reflected signals, resulting in a very small and temporary blockage area if it occurs. Further, the reception of signals from multiple satellites means that the loss of a signal from one satellite is not consequential since signals from other satellites are still available to accurately determine the position of the GPS receiver.

Manitoba-Minnesota Transmission Project



EMF decrease rapidly with distance from the source

Exposure to magnetic field directly beneath a 500 kV transmission line is similar to that of a hairdryer or a microwave at a distance of 6 inches.

This figure represents magnetic fields 1.0 m above ground for a preliminary 500 kV line design.

*International Commission on Non-Ionizing Radiation Protection (ICNIRP) www.icnirp.org
 ICNIRP Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 Hz – 100 kHz). Published in: Health Physics 99(6): 818-836; 2010



FACT SHEET

ON THE GUIDELINES FOR LIMITING EXPOSURE TO TIME-VARYING ELECTRIC AND MAGNETIC FIELDS (1 Hz – 100 kHz) PUBLISHED IN HEALTH PHYS 99(6):818-836; 2010.

ICNIRP is the internationally recognized body that sets guidelines for protection against adverse health effects of non-ionizing radiation. It has recently published Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz to 100 kHz); this fact sheet describes the content of these guidelines and their scientific background.

The guidelines replace previous recommendation given by ICNIRP for this frequency range. They are derived from the current scientific knowledge as described in extensive reviews especially those of the World Health Organization and ICNIRP. Some of the recommendations given in the new document deviate from former ones. Where appropriate, such differences are explained in detail.

The main interaction of low frequency time-varying electric and magnetic fields (EMF) with the human body is the induction of electric fields and associated currents in the tissues. In addition, exposure to low frequency electric fields can cause surface electric charge effects.

The responsiveness of electrically excitable nerve and muscle tissue to electric stimuli including those induced by exposure to low frequency electric and magnetic fields has been well established. A minimum electric field threshold of about 4-6 V m⁻¹ has been calculated for peripheral nerve stimulation, using a heterogeneous human model and data from volunteer exposure to the switched gradient fields of magnetic resonance (MR).

The most robustly established effect of electric fields below the threshold for direct nerve or muscle excitation is the induction of magnetic phosphenes, a perception of faint flickering light in the periphery of the visual field. They are thought to result from the interaction of the induced electric field with electrically excitable cells in the retina. This is formed as an outgrowth of the forebrain and can be considered a good but conservative model of processes that occur in CNS tissue in general. The threshold for induction of phosphenes in the retina has been estimated to lie between about 50 and 100 mV m⁻¹ at 20 Hz. The evidence for neurobehavioral effects on brain electrical activity, cognition, sleep and mood in volunteers exposed to low frequency electric and magnetic fields is much less clear.

The scientific data available so far do not indicate that low frequency electric and/or magnetic fields affect the neuroendocrine system in a way that these would have an adverse impact on human health. There is no substantial evidence for an association between low frequency exposure and diseases such as Parkinson's disease, multiple sclerosis, and cardiovascular diseases. The evidence for an association between low frequency exposure and Alzheimer's disease and amyotrophic lateral sclerosis is inconclusive. The evidence for an association between low frequency exposure and developmental and reproductive effects is very weak.

A considerable number of epidemiological reports, published particularly during the 1980s and '90s, indicated that long term exposure to 50-60 Hz magnetic fields might be associated with an increased risk of childhood leukemia. Two pooled analyses indicate that an excess risk may exist for average exposures exceeding 0.3-0.4 μT . However, a combination of selection bias, some degree of confounding and chance could possibly explain the results. In addition, no biophysical mechanism has been identified and the experimental results from the animal and cellular laboratory studies do not support the notion that exposure to 50-60 Hz magnetic fields is a cause of childhood leukemia.

It is the view of ICNIRP that the currently existing scientific evidence that prolonged exposure to low frequency magnetic fields is causally related with an increased risk of childhood leukemia is too weak to form the basis for exposure guidelines. Thus, the perception of surface electric charge, the direct stimulation of nerve and muscle tissue and the induction of retinal phosphenes are the only well established adverse effects and serve as the basis for guidance.

Based on the review of the scientific evidence summarized above, ICNIRP recommends the following limits on exposure:

Occupational exposures: In the frequency range 10 Hz to 25 Hz, occupational exposure should be limited to fields that induce electric field strengths in CNS tissue of the head (i.e., the brain and retina) of less than 50 mV m^{-1} in order to avoid the induction of retinal phosphenes. These restrictions should also prevent any possible transient effects on brain function. These effects are not considered to be adverse health effects; however, ICNIRP recognizes that they may be disturbing in some occupational circumstances and should be avoided, but no additional reduction factor is applied. At lower frequencies the limit value for the induced electric field strength rises in reverse proportion to frequency. At higher frequencies, up to 400 Hz the limit value rises proportional to frequency. At frequencies in the range 400 Hz to 3 kHz occupational exposure should be limited to fields that induce electric field strengths in all parts of the body of less than 800 mV m^{-1} in order to avoid peripheral and central myelinated nerve stimulation. At frequencies above 3 kHz the limit value rises proportionally with frequency.

In controlled environments, where workers are informed about the possible transient effects, exposure in the range 1 Hz to 400 Hz, should be limited to fields that induce electric fields in the head and body of less than 800 mV m^{-1} in order to avoid peripheral and central myelinated nerve stimulation. This value has been obtained by applying a reduction factor of 5 to the peripheral nerve stimulation threshold of 4 V m^{-1} in order to account for the uncertainties described above. These restrictions rise proportionally with frequency above 3 kHz.

General public exposures: In the frequency range 10 Hz to 25 Hz, general public exposure should be limited to fields that induce electric field strengths in CNS tissue of the head (i.e., the brain and retina) of less than 10 mV m^{-1} , in order to avoid the induction of retinal phosphenes. These restrictions should also prevent any possible transient effects on brain function. A reduction factor of 5 has been applied to the phosphene threshold of 50 mV m^{-1} in order to account for uncertainties. Above and below this frequency range, the basic restriction rises. At 1000 Hz it intersects with basic restrictions that protect against peripheral and central myelinated nerve stimulation. Here, a reduction factor of 10, with respect to the above mentioned stimulation threshold of 4 V m^{-1} , results in a basic restriction of 400 mV m^{-1} , which should be applied to the tissues of all parts of the body.

The rationale for these guidelines limits can be found in full in "Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz to 100 kHz) Health Physics 99(6):818-836; 2010."

The main changes, compared with previous recommendations by ICNIRP are:

- The basic restrictions are based on induced internal electric fields, instead of induced current density, as this is the physical quantity that determines the biological effect. Previous health risk

assessments were based on induced current density as most experimental data at that time were based on this metric. Now, sufficient information based on induced internal electric fields is available to use this metric in guidelines.

- Previous guidelines were set to prevent effects on nervous system functions and a limitation of induced current density in CNS tissue only was recommended. Phosphenes were not considered to be an adverse effect. ICNIRP now considers the effects on the retina as a model of effects in the brain and the phosphene threshold provides a basis for limiting exposure as specified above. In addition, stimulation effects on peripheral and central myelinated nerves have been included as explained above. This leads to an exposure limitation in any tissue of the body. The limit values were based on current scientific evidence and not simply converted on the basis of tissue conductivity from the former guidance on induced current density.

The table summarizes the basic restrictions

Exposure characteristic	Frequency range	Internal electric field ($V m^{-1}$)
Occupational exposure		
CNS tissue of the head	1 - 10 Hz	0.5 / f
	10 Hz - 25 Hz	0.05
	25 Hz - 400 Hz	$2 \times 10^{-3} f$
	400 Hz - 3 kHz	0.8
	3 kHz - 10 MHz	$2.7 \times 10^{-4} f$
All tissues of head and body	1 Hz - 3 kHz	0.8
	3 kHz - 10 MHz	$2.7 \times 10^{-4} f$
General public exposure		
CNS tissue of the head	1 - 10 Hz	0.1 / f
	10 Hz - 25 Hz	0.01
	25 Hz - 1000 Hz	$4 \times 10^{-4} f$
	1000 Hz - 3 kHz	0.4
	3 kHz - 10 MHz	$1.35 \times 10^{-4} f$
All tissues of head and body	1 Hz - 3 kHz	0.4
	3 kHz - 10 MHz	$1.35 \times 10^{-4} f$

Notes:

- f is the frequency in Hz
- All values are rms
- in the frequency range above 100 kHz, RF specific basic restrictions need to be considered additionally.

Reference levels: Reference levels have been determined by mathematical modeling for the exposure conditions where the variation of the electric or magnetic field over the space occupied by the body is relatively small, i.e., uniform exposures. They are calculated for the condition of maximum coupling of the field to the exposed individual, thereby providing maximum protection. Frequency dependence and dosimetric uncertainties were taken into account. At the power frequency (50 Hz) the reference levels for occupational exposure are $10 kV m^{-1}$ for the electric field, and 1 mT for the magnetic field. With

respect to general public exposure the reference levels are 5 kV m^{-1} for the electric field and $200 \text{ } \mu\text{T}$ for the magnetic field.

For a very localized source with a distance of a few centimeters from the body, the only realistic option for the exposure assessment is to determine dosimetrically the induced electric field, case-by case. With greater distances the distribution of the field becomes less localized but is still non-uniform, in which case it is possible to compare the spatial average along the body or part of it with the reference levels. Contact current may result in shock and burn hazards. Therefore reference levels for contact current are given for frequencies up to 100 kHz.

The main changes compared to the previous recommendations are:

- While in 1998 dosimetric considerations were based on simple geometrical models, the new guidelines use data from computational simulations based on anatomically detailed human body models.
- The revised basic restrictions as well as the dosimetric models used result in reference levels that deviate in some areas from previous ones. There is a tendency for magnetic field reference levels to be less conservative, whereas the electric field reference levels are, with some exceptions, basically unchanged.

Additional advice is given on how to apply the guidelines in the case of simultaneous exposure to electric and magnetic fields, to multiple frequency fields and to non-sinusoidal fields. There is no fundamental change compared with previous advice.

Protective Measures: ICNIRP notes that protection of people exposed to electric and magnetic fields could be ensured by compliance with all aspects of these guidelines. Appropriate protective measures must be implemented when exposure results in the basic restrictions being exceeded. Engineering controls should be undertaken in conjunction with administrative controls. In the workplace, additionally personal protection measures can be used, but these should be regarded as a last resort. It is also essential to implement rules that will prevent interference with medical electronic devices, detonation of electro-explosive devices, and fires and explosions resulting from ignition of flammable materials by sparks. All this is in line with previous advice.

Long-Term Effects: As noted above, epidemiological studies have found that everyday chronic low-intensity power frequency magnetic field exposure is associated with an increased risk of childhood leukemia. However, laboratory studies have not supported this association and a causal relationship between magnetic fields and childhood leukemia or any other long term effect has not been established. The absence of established causality is the reason why the epidemiological results have not been addressed in the basic restrictions. ICNIRP is well aware that these epidemiological results have triggered concern within the population in many countries. It is ICNIRP's view, that this concern is best addressed within the national risk management framework. Risk management in general is based on many different aspects, including social, economic, and political issues. ICNIRP in this context provides scientifically based advice only. Additional risk management advice, including considerations on precautionary measures, has been given for example by the World Health Organization and other entities.

Further details can be found in Health Physics 99(6):818-836; 2010.

There is a shortage of high-voltage transmission lines, and demand is expected to grow in the future. Even so, these lines are usually unwanted as a result of the real and perceived impacts to people and natural resources. Selection of transmission line routes is a growing source of public controversy and regulatory scrutiny throughout the world.

A siting methodology was developed through a \$500,000 collaborative effort co-funded by the Electric Power Research Institute (EPRI), the nonprofit Georgia Transmission Corporation (GTC), and Photo Science, a geospatial solutions contractor. The methodology addresses these criticisms by allowing external groups to participate in the process and by making decisions by utility professionals more transparent and credible. It uses a GIS to map all geographic features, assign stakeholder-generated numerical suitability values, assign engineering constraints, generate corridor alternatives using computer algorithms, and automatically create reports summarizing criteria used and values assigned. The methodology has proven to be objective, consistent, and defensible. A report is available to help transmission line developers implement the methodology.

The methodology is being adopted throughout the United States and has received international interest. The siting methodology earned GTC the National Rural Electric Cooperative Association's 2006 Cooperative Innovators Award.

Siting Transmission Lines Using the EPRI-GTC Siting Methodology

Jesse Glasgow

Keywords: geographic information system, stakeholder input, transmission line siting

INTRODUCTION

Electric transmission lines are a critical component to the modern electric power system. Transmission lines carry wholesale electricity in bulk from the generator to the local distribution systems or industrial consumers. Transmission lines move power at a high voltage from plants to substations and transform power from high voltage to low voltage so that it can be delivered to homes and businesses. Transmission line voltage can range from 69 to 765 kV. Subtransmission lines, ranging from 34.5 to 69 kV, are often grouped with major transmission lines in a power company's organization structure. Lower-voltage lines require smaller structures and narrower rights-of-way (ROWs), while higher-voltage lines require larger structures and wider ROWs. In general, the perception is that lower-voltage lines have less impact and, therefore, the siting criteria may differ from those of higher-voltage lines.

Population growth and migration, increased per-capita electricity consumption, new power plants, and the need to add efficiency to the transmission system have increased the need for new transmission lines. The world population reached 7 billion in 2011, just 12 years after reaching 6 billion, and, in mid-2011, the U.S. population reached 312 million and has grown approximately 1% per year from 2000 to 2011 (Population Reference Bureau 2011). The world population is expected to peak at 9.2 billion in 2075 (United Nations 2004).

World per-capita electricity consumption increased by 25% from 1990 to 2005. The U.S. per-capita electricity consumption increased by almost 17% in that same time frame (International Energy Agency 2007). Residential electricity use in the United States increased by 23% from 1999 to 2009, and the trend is expected to continue increasing by 20% from 2007 to 2030 (Energy Information Administration 2009). Between 2010 and 2030, the U.S. electric utility industry will need to make a total infrastructure investment of \$1.5 to \$2.0 trillion—\$300 billion of which is needed for transmission (Chupka et al. 2008).

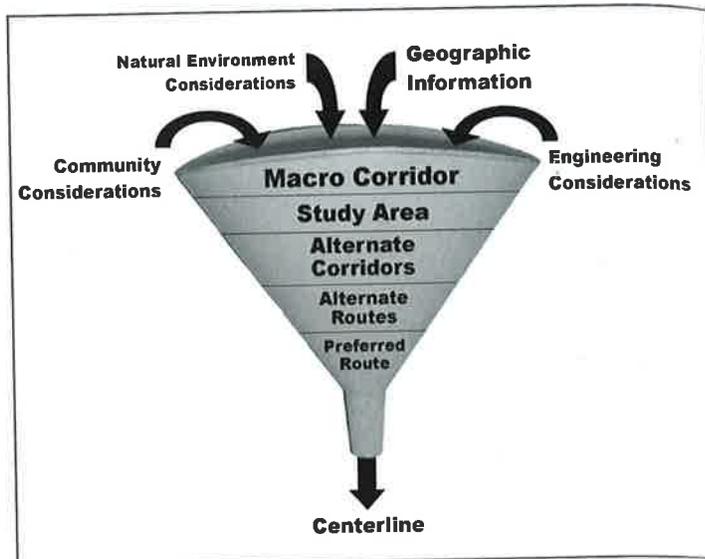


Figure 1. Corridor analysis funnel.

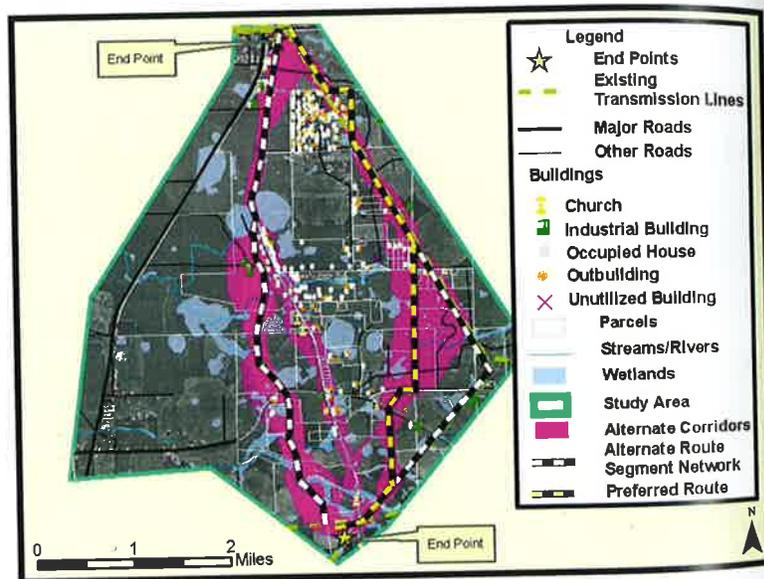


Figure 2. Alternative routes within alternative corridors.

Nevertheless, public opposition to new transmission lines is increasing. Typically, people prefer not to have transmission lines erected near where they live, work, or play. This is because of both real and perceived impacts to the scenery, property values, land use, and safety. At the same time, many people prefer to keep new transmission lines out of undeveloped natural areas so as to preserve wildlife habitat. Transmission line developers often find themselves between a rock and a hard place (Mortenson 2009; Wheeler 2009).

EPRI-GTC SITING METHODOLOGY

Development of transmission line routes is a growing source of public controversy and regulatory scrutiny. A siting methodology developed by Georgia Transmission Corporation (GTC), Photo Science, and the Electric Power Research Institute (EPRI) addresses these criticisms. The EPRI-GTC siting methodology allows external groups to participate in the process and makes decisions by utility professionals more

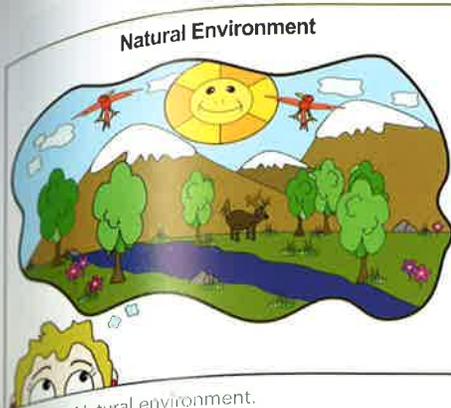


Figure 3. Natural environment.

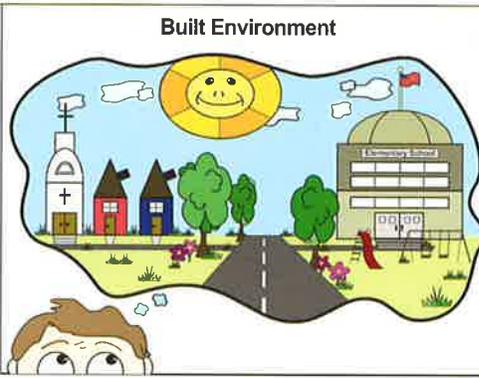


Figure 4. Built environment.

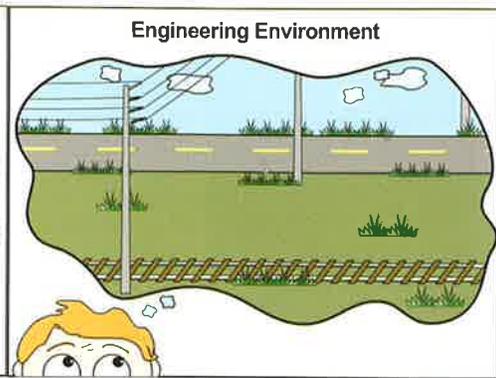


Figure 5. Engineering environment.

transparent and credible. It capitalizes on the ability of GIS software to map all geographic features in a study area, assign numerical suitability values to all features, assign engineering constraints, generate corridor alternatives using statistically sound algorithms, automatically generate alternative corridor reports, and automatically create reports summarizing criteria used and values assigned. At least nine utilities have adopted the methodology, and it has been used on more than 70 projects in at least seven U.S. states and Korea.

Methodology Overview

The funnel (Figure 1) is a conceptual diagram that illustrates the siting methodology at a high level. Values and weights developed during the process are applied to geographic information. During each phase of the process, as the area of interest becomes more focused and defined, and the data incorporated become more detailed and accurate. The final stage of this siting methodology culminates in route selection, where a preferred route, or centerline, is selected for the proposed facility.

Stakeholder Input

One of the key components to this methodology is the incorporation of input from external stakeholders. Stakeholders develop the criteria, determine relative suitability, and determine the relative importance of the criteria used to identify alternative corridors. Stakeholders represent members of com-

munity groups, regulatory agencies, conservation groups, other utilities, government agencies, elected officials, and others. This is done on a programmatic basis, and the resulting model is used on multiple projects.

Stakeholder input is used to create suitability maps from three perspectives. One perspective is the built environment, which contains mapped features that represent human and cultural resource areas. Another is the natural environment, which includes mapped features that represent plants, animals, and hydrologic resources. Finally, there is an engineering concerns perspective, which addresses physical constraints and contains features for maximizing co-location and minimizing cost and schedule delays. A computer algorithm is applied to evaluate all possible routes, determining the routes most preferred from each perspective. The top 3% of all the routes are used for the alternative corridors (Figure 2).

Once the corridors are identified, the process continues down the funnel. More detailed data are collected for these refined areas. As the process moves down the funnel, the data become more detailed and accurate, and the area to locate the transmission line becomes more concentrated and precise.

The professional siting team identifies alternative routes (Figure 2) within the alternative corridors. The alternative route evaluation model applies a standard set of metrics and weights to each route.

To select the preferred route, all top-scoring routes are scrutinized by the project team in a procedure known as "expert judgment." The team decides on a set of issues or risk factors that may be unique to each project. These issues are more subjective—such as public concern, maintenance accessibility, and schedule delay risk. Using the expert judgment model, the project team selects the preferred route.

Siting Criteria

Transmission line siting criteria can be grouped into three general categories: Criteria aimed at minimizing impacts to the natural environment (Figure 3), the built environment (Figure 4), and the engineering environment (Figure 5). By grouping criteria in this manner, models can be developed to place emphasis on one of these groups or consider them equally. This organization structure also provides options for obtaining input from stakeholders with varying expertise. Some stakeholders may have more expertise and concern relative to people, places, the natural environment, or engineering.

Another consideration for criteria is the phase of the project. As the project proceeds, more-detailed criteria are considered. The criteria used for the identification of corridors may not be as detailed or specific as the criteria used to evaluate alternative routes.

Following is an example of criteria for the identification of alternative corridors within a siting program in the eastern United States. It should be noted

that these criteria may be different in different regions; therefore, the model should be updated to accommodate region-specific concerns. These criteria and the suitability values and weights were identified by a group of external stakeholders.

Natural Environment

- Streams and Wetlands
 - ⇒ No streams and wetlands
 - ⇒ Small streams
 - ⇒ Nonforested, noncoastal wetlands
 - ⇒ Large streams
 - ⇒ Nonforested coastal wetlands
 - ⇒ Trout streams
 - ⇒ Forested wetlands
- Floodplain
 - ⇒ In the floodplain
 - ⇒ Not in the floodplain
- Public Lands (see other public lands, in the avoidance category)
 - ⇒ Areas where there are no public lands
 - ⇒ Wildlife management areas (private ownership)
 - ⇒ Other conservation land
 - ⇒ U.S. Forest Service land
 - ⇒ Wildlife management areas (state owned)
- Protected Wildlife Habitat
 - ⇒ Federally endangered
 - ⇒ Federally threatened
 - ⇒ State endangered
 - ⇒ State threatened
 - ⇒ No protected wildlife habitat
- Land Cover
 - ⇒ Open land
 - ⇒ Managed pine plantation
 - ⇒ Row crops
 - ⇒ Developed land
 - ⇒ Forest
- Avoidance Areas
 - ⇒ EPA Superfund sites
 - ⇒ Federal, state, and local parks
 - ⇒ Wilderness areas
 - ⇒ National Wild and Scenic Rivers
 - ⇒ Wildlife refuge

Built Environment

- Proximity to Buildings
 - ⇒ Close to buildings
 - ⇒ Far from buildings
- Building Density
 - ⇒ High building density
 - ⇒ Low building density
- Proximity to Eligible Historic Structures
 - ⇒ Close to historic structures
 - ⇒ Far from historic structures
- Proposed Developments
 - ⇒ Area with proposed development
 - ⇒ No proposed development
- Land Use
 - ⇒ Undeveloped
 - ⇒ Developed nonresidential
 - ⇒ Residential
- Avoidance Areas
 - ⇒ Listed archeology sites, historic structures, and districts
 - ⇒ Areas of ritual importance
 - ⇒ School and daycare parcels
 - ⇒ Cemetery parcels
 - ⇒ Church parcels
 - ⇒ Buildings

Engineering Environment

- Slope
 - ⇒ High slope
 - ⇒ Low slope
- Intensive Agriculture
 - ⇒ Center pivot irrigation
 - ⇒ Fruit orchards
 - ⇒ No intensive agriculture
- Co-Location Opportunities
 - ⇒ Rebuild existing transmission lines
 - ⇒ Parallel existing transmission lines
 - ⇒ Parallel gas transmission lines
 - ⇒ Parallel roads
 - ⇒ Parallel interstates
 - ⇒ Scenic highways
 - ⇒ Parallel railroads
- Avoidance Areas
 - ⇒ Airports and glide paths
 - ⇒ Nonspannable water
 - ⇒ Military facilities
 - ⇒ Mines and quarries

Stakeholder Calibration

The methodology recommends that a group of stakeholders identify/refine the siting criteria and assign relative suitability values and relative importance weights (Figure 6). This is accomplished by using the modified Delphi process to gain consensus on the suitability values and the analytical hierarchy process to

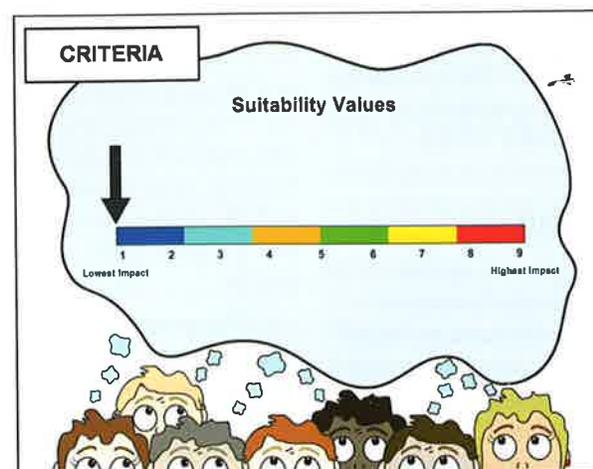


Figure 6. Suitability values.

Engineering		Natural Environment		Built Environment		Avoidance Areas
Linear Infrastructure	48.3%	Floodplain	6.2%	Proximity to Buildings	11.5%	Listed archaeology sites
Rebuild existing transmission lines	1	No floodplain	1	> 1200	1	Listed NRHP districts and buildings
Parallel existing transmission lines	1.4	100-year floodplain	9	900-1200	1.8	Eligible NRHP districts
Parallel roads ROW	3.6	Streams/Wetlands	20.9%	600-900	2.6	Airports
Parallel gas pipelines	4.5	No streams/wetlands	1	300-600	4.2	EPA Superfund sites
Parallel railway ROW	5	Streams < 5 ft ³ /sec. + regulatory buffer	5.1	0-300	9	Nonspannable water bodies
No linear infrastructure	5.5	Nonforested noncoastal wetlands + 30-foot buffer	6.1	Eligible NRHP Historic Structures	13.9%	State and national parks
Future GDOT plans	7.5	Rivers/streams > 5 ft ³ /sec. + regulatory buffer	7.4	>1500	1	Military facilities
Parallel interstates ROW	8.1	Nonforested coastal wetlands + 30-foot buffer	8.4	0-1500	9	City and county parks
Road ROW	8.4	Trout streams (50-foot buffer)	8.5	Building Density	37.4%	Mines and quarries
Scenic highways ROW	9	Forested wetlands + 30-foot buffer	9	0-0.05 buildings/acre	1	Daycare parcels
Slope	9.1%	Public Lands	16.0%	0.05-0.2 buildings/acre	3	Cemetery parcels
Slope 0-15%	1	No public lands	1	0.2-1 buildings/acre	5	School parcels (K-12)
Slope 15-30%	5.5	WMA, not state owned	4.8	1-4 buildings/acre	7	Church parcels
Slope >30%	9	Other conservation land	8.3	4-25 buildings/acre	9	USFS wilderness area
Intensive Agriculture	42.6%	U.S. Forest Service	8	Proposed Development	6.3%	National Wild and Scenic Rivers
No intensive agriculture	1	WMA, state owned	9	No proposed development	1	Areas of ritual importance
Fruit orchards	5	Land Cover	20.9%	Proposed development	9	Wildlife refuge
Pecan orchards	9	Open land (pastures, scrub/shrub, etc.)	1	Spannable Lakes and Ponds	3.8%	Buildings + buffer
Center pivot irrigation	9	Managed pine plantations	2.2	No spannable lakes or ponds	1	
		Row crops and horticulture	2.2	Spannable lakes and ponds	9	
		Developed land	6.5	Major Property Lines	8.0%	
		Hardwood/mixed/natural coniferous forests	9	Edge of field	1	
		Wildlife Habitat	36.0%	Land lots	7.9	
		No sensitive wildlife habitat	1	No major property lines	9	
		Species of concern habitat	3	Land Use	19.1%	
		Natural areas	9	Undeveloped	1	
				Nonresidential	3	
				Residential	9	

Table 1. Alternative corridor model.

develop relative importance weights. The stakeholders are grouped by expertise/concern, and a facilitator drives the group to as much consensus as possible. The stakeholder input process results in a model that contains weights (measured by percentage of total) that represent the relative suitability of the layers and suitability values represent-

ing the relative suitability of the features. The higher the weight, the more important the layer is within that group. The lower the suitability value, the more suitable a feature is for a new transmission line.

GIS tools, such as ESRI's Spatial Analyst, are used to perform suitability and least-cost-path analysis. Multiple suit-

ability maps and corridors are generated based on emphasizing each perspective. For example, a fivefold emphasis is placed on the built perspective to develop the built corridor. Finally, an analysis is performed equally weighting all three perspectives. This process results in four corridors which, when combined, form the alternative corridors (Table 1).

Table 2. Alternative route evaluation model.

For All Routes		Sample Weights					
Feature	33%	Route A	Route B	Route C	Route D	Route E	Route F
		Unit	Unit	Unit	Unit	Unit	Unit
Built							
Relocated residences (within 75-foot corridor)	44.3%	0.00	0.00	1.00	0.00	1.00	0.00
<i>Weighted</i>		0.00	0.00	0.44	0.00	0.44	0.00
Proximity to residences (300 feet)	13.1%	0.00	1.00	0.25	0.13	0.28	0.16
<i>Weighted</i>		0.00	0.13	0.03	0.02	0.04	0.02
Proposed residential developments	5.4%	1.00	0.00	0.50	0.00	0.00	0.00
<i>Weighted</i>		0.05	0.00	0.03	0.00	0.00	0.00
Proximity to commercial buildings (300 feet)	3.6%	0.50	0.75	0.00	0.00	0.00	1.00
<i>Weighted</i>		0.02	0.03	0.00	0.00	0.00	0.04
Proximity to industrial buildings (300 feet)	1.8%	0.33	0.00	0.00	0.00	1.00	1.00
<i>Weighted</i>		0.01	0.00	0.00	0.00	0.02	0.02
School, daycare, church, cemetery, park parcels (#)	16.3%	1.00	0.14	0.14	0.00	0.00	0.00
<i>Weighted</i>		0.16	0.02	0.02	0.00	0.00	0.00
NRHP listed/eligible structures/districts (1500 feet from edge of ROW)	15.5%	1.00	0.50	0.00	0.00	0.00	0.00
		0.16	0.08	0.00	0.00	0.00	0.00
TOTAL	100.0%	0.40	0.26	0.53	0.02	0.50	0.07
WEIGHTED TOTAL		0.13	0.09	0.17	0.01	0.16	0.02
Natural	33%						
Natural forests (acres)	9.3%	0.00	0.54	0.49	0.61	0.88	1.00
<i>Weighted</i>		0.00	0.05	0.05	0.06	0.08	0.09
Stream/river crossings	38.0%	0.00	0.50	0.00	0.00	1.00	1.00
<i>Weighted</i>		0.00	0.19	0.00	0.00	0.38	0.38
Wetland areas (acres)	40.3%	0.02	0.00	0.62	0.72	0.90	1.00
<i>Weighted</i>		0.01	0.00	0.25	0.29	0.36	0.40
Floodplain areas (acres)	12.4%	0.29	0.00	1.00	0.85	0.67	0.29
<i>Weighted</i>		0.04	0.00	0.12	0.11	0.08	0.04
TOTAL	100.0%	0.04	0.24	0.42	0.45	0.91	0.91
WEIGHTED TOTAL		0.01	0.08	0.14	0.15	0.30	0.30
Engineering	33%						
Miles of rebuild with existing transmission line	65.6%	1.00	0.16	0.84	0.00	0.43	0.32
<i>Weighted</i>		0.66	0.11	0.55	0.00	0.28	0.21
Miles of co-location with transmission line	19.2%	2.58	1.25	8.50	2.36	3.69	9.50
<i>Weighted</i>		0.50	0.24	1.63	0.45	0.71	1.82
Miles of co-location with roads	7.8%	0.84	1.00	0.12	0.87	0.70	0.00
<i>Weighted</i>		0.07	0.08	0.01	0.07	0.05	0.00
Total project costs	7.4%	4.05	1.04	3.63	0.62	0.43	0.23
<i>Weighted</i>		0.30	0.08	0.27	0.05	0.03	0.02
TOTAL	100.0%	1.52	0.50	2.46	0.57	1.08	2.05
WEIGHTED TOTAL		0.50	0.17	0.81	0.19	0.36	0.68
SUM OF WEIGHTED TOTALS		0.65	0.33	1.12	0.34	0.82	1.00

Table 3. Expert judgment model.

For Top 3 to 5 Routes (Internal)

Expert Judgment	Sample Weights			
	Per Project	Route A	Route B	Route D
Visual issues	10%	1	3	1
<i>Weighted</i>		0.1	0.3	0.1
Community issues	20%	1	3	2
<i>Weighted</i>		0.2	0.6	0.4
Schedule delay risk	0%	0	0	0
<i>Weighted</i>		0	0	0
Special permit issues	40%	1	3	1
<i>Weighted</i>		0.4	1.2	0.4
Construction/maintenance accessibility	30%	3	1	2
<i>Weighted</i>		0.9	0.3	0.6
Environmental justice	0%	0	0	0
<i>Weighted</i>		0	0	0
TOTAL	100%	1.6	2.4	1.5

The interdisciplinary project team identifies alternative routes within the alternative corridors that minimize impacts and maximize efficiency in accordance with each company's principles. Once the alternative routes are identified, they are evaluated using the alternative route evaluation model (Table 2). This model normalizes metrics on a scale from 0 to 1 so that metrics using different units can be compared. Stakeholders typically identify the criteria and calibrate the weights in this model on a programmatic basis and use it on multiple projects. Typically, a group of internal stakeholders (company representatives) will calibrate this model with corporate values. However, there have been instances of external stakeholders, such as regulatory agency representatives, calibrating this model for specific projects.

Regardless of how this model is calibrated, it is used to evaluate the alternative routes and filter out the top routes. Sensitivity analysis is applied by, again, placing fivefold emphasis on the three perspectives and equally weighting all three perspectives. This method can be used to produce the top route finalist.

The top three to five routes are then taken into the expert judgment model (Table 3). This model is used to guide the project team in selecting the preferred route. The project team adjusts the criteria as necessary on a per project basis, as well as on the relative importance weights. Then the project team ranks each of the route finalists based on their relative score in comparison to the other finalists. The route with the lowest score is the preferred route.

Finally, the route is selected and a detailed technical routing report is created that describes the study area, alternative corridors, alternative routes, and preferred route. This report also describes the siting methodology.

CONCLUSION

Population growth and migration, increased per-capita electricity consumption, new power plants, and the need to add efficiency to the transmission system have increased the need for new transmission lines. There is significant public opposition to new transmission line development projects. The EPRI-GTC siting methodology offers a standardized, objective, consistent, inclusive, transparent, and defensible methodol-

ogy for siting new transmission lines. Application of this methodology may lead to more-defensible siting programs and transmission line development projects.

ACKNOWLEDGMENTS

The EPRI-GTC siting methodology was developed by a core team of utility practitioners, academics, and consultants including Gayle Houston; Christy Johnson; Christopher Smith; Steven French, Ph.D.; Steven Richardson, Esq.; Paul Zwick, Ph.D.; Joseph Berry, Ph.D.; Elizabeth Kramer, Ph.D.; and the author.

REFERENCES

- Chupka, M.W., R. Earle, P. Fox-Penner, and R. Hledik. 2008. *Transforming America's Power Industry: The Investment Challenge 2010-2030*. http://www.eei.org/ourissues/finance/Documents/Transforming_Americas_Power_Industry.pdf (accessed February 2, 2012).
- Energy Information Administration. 2009. "Energy Demand." *Annual Energy Outlook 2009 with Projections to 2030, DOE/EIA-0383*. <http://www.eia.doe.gov/oiaf/aeo/demand.html> (file no longer available; refer to <http://www.eia.gov/oiaf/aeo/demand.html> for more recent data).
- International Energy Agency (IEA) Statistics Division. 2007. *Energy Balances of OECD Countries (2008 edition)—Economic Indicators, and Energy Balances of Non-OECD Countries (2007 edition)—Economic Indicators*. Paris: IEA. <http://earthtrends.wri.org/text/energy-resources/variable-574.html> (accessed February 2, 2012).
- Mortenson, E. 2009. "Eastern Oregon Power Line Proposal Sparks Opposition." *The Oregonian*. http://www.oregonlive.com/environment/index.ssf/2009/03/eastern_oregon_powerline_propo.html (accessed February 2, 2012).
- Population Reference Bureau. 2011. *2011 World Population Data Sheet*. <http://www.prb.org/Publications/Datasheets/2011/world-population-data-sheet/data-sheet.aspx> (accessed February 1, 2012).
- United Nations Department of Economic and Social Affairs, Population Division. 2004. *World Population to 2300*. <http://www.un.org/esa/population/publications/longrange2/WorldPop2300final.pdf> (accessed February 2, 2012).
- Wheeler, T. B. 2009. "Opposition to Proposed Power Line Grows on Md. Shore." *The Baltimore Sun*. <http://ceds.org/DCSE/BaltimoreSun7-11-09.pdf> (accessed February 2, 2012).

AUTHOR PROFILE

Jesse Glasgow

Photo Science, Inc., 2100 East Exchange Place, Tucker, GA, jglasgow@photoscience.com, (770) 270-7769

Since 1999, Jesse Glasgow has been responsible for oversight of the geographic information acquisition, management, analysis, and distribution functions and staff for Georgia Transmission Corporation (GTC). While at GTC, he has led the development of business processes and custom software solutions in support of the siting, design, construction, operations, and maintenance of electric transmission facilities. Glasgow was a team leader in developing the EPRI-GTC siting methodology. Additionally, Glasgow manages transmission line siting projects and consults with a variety of clients involved in developing electric transmission lines, power plants, and greenways. Glasgow earned a BS degree in professional geography from the University of North Alabama and a GIS certification from the University of North Alabama, and is a Licensed Professional Land Surveyor (GIS surveyor) in South Carolina. He serves on the board of directors for the MillionMile Greenway organization. Prior to working in the utility/energy industry, Glasgow was a planner at a regional government agency.



Health
Canada

Santé
Canada

Your health and
safety... our priority.

Votre santé et votre
sécurité... notre priorité.

Electric and Magnetic Fields

Updated: November 2012

Original: November 2001

IT'S YOUR HEALTH

Electric and Magnetic Fields from Power Lines and Electrical Appliances

THE ISSUE

Some people are concerned that daily exposure to electric and magnetic fields (EMFs) may cause health problems.



ELECTRICITY AND ELECTRIC AND MAGNETIC FIELDS (EMFS)

Electricity delivered through power lines is important in today's society. It is used to light homes, prepare food, run computers and operate other household appliances, such as TVs and radios. In Canada, appliances that plug into a wall socket use electric power that flows back and forth at a frequency of 60 cycles per second (60 hertz). The frequency used with the distribution of electricity from power lines and electrical appliances is different than the frequencies used for [Wi-Fi](#), [cell phones](#), and [smart meters](#).

Every time you use electricity and electrical appliances, you are exposed to electric and magnetic fields (EMFs) at extremely low frequencies (ELFs). The term "extremely low" is described as any frequency below 300 hertz. EMFs produced by the transmission and use of electricity belong to this category.

EMFs are invisible forces that surround electrical equipment, power cords, and wires that carry electricity, including outdoor power lines.

- *Electric Fields:* These are formed whenever a wire is plugged into an outlet, even when the appliance is not turned on. The higher the voltage, the stronger the electric field.
- *Magnetic Fields:* These are formed when electric current is flowing within a device or wire. The greater the current, the stronger the magnetic field.

EMFs can occur separately or together. For example, when you plug the power cord for a lamp into a wall socket, it creates an electric field along the cord. When you turn the lamp on, the flow of current through the cord creates a magnetic field. Meanwhile, the electric field is still present.

POWER LINES AND YOUR HOME

EMFs are strongest when close to their source. As you move away from the source, the strength of the fields fades rapidly. This means you are exposed to stronger EMFs when standing close to a source (e.g., right beside a transformer box or under a high voltage power line), and you are exposed to weaker fields as you move away.

When you are inside your home, the magnetic fields from high voltage power lines and transformer boxes are often weaker than those from household electrical appliances.

Electric fields can be shielded using materials such as metal. Things like buildings and trees—and even the ground when power lines are buried—can block electric fields.

CANADIANS EXPOSURE TO EMFS AT EXTREMELY LOW FREQUENCIES (ELFS)

On a daily basis, most Canadians are exposed to EMFs generated by household wiring, lighting, and any electrical appliance that plugs into the wall, including hair dryers, vacuum cleaners and toasters. In the workplace, common sources of EMFs include computers, air purifiers, photocopiers, fax machines, fluorescent lights, electric heaters, and electric tools in machine shops, such as drills, power saws, lathes and welding machines.

EXPOSURE IN CANADIAN HOMES, SCHOOLS AND OFFICES PRESENT NO KNOWN HEALTH RISKS

There have been many studies on the possible health effects from exposure to EMFs at ELFs. While it is known that EMFs can cause weak electric currents to flow through the human body, the



intensity of these currents is too low to cause any known health effects. Some studies have suggested a possible link between exposure to ELF magnetic fields and certain types of childhood cancer, but at present this association is not established.

The [International Agency for Research on Cancer \(IARC\)](#) has classified ELF magnetic fields as “possibly carcinogenic to humans”. The IARC classification of ELF magnetic fields reflects the fact that some limited evidence exists that ELF magnetic fields might be a risk factor for childhood leukemia. However, the vast majority of scientific research to date does not support a link between ELF magnetic field exposure and human cancers. At present, the evidence of a possible link between ELF magnetic field exposure and cancer risk is far from conclusive and more research is needed to clarify this “possible” link.

Health Canada is in agreement with both the World Health Organization and IARC that additional research in this area is warranted.

REDUCE YOUR RISK

Health Canada does not consider that any precautionary measures are needed regarding daily exposures to EMFs at ELFs. There is no conclusive evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those

located just outside the boundaries of power line corridors.

THE GOVERNMENT OF CANADA'S ROLE

Health Canada, along with the World Health Organization, monitors scientific research on EMFs and human health as part of its mission to help Canadians maintain and improve their health.

International exposure guidelines for exposure to EMFs at ELFs have been established by the [International Commission on Non-Ionizing Radiation Protection \(ICNIRP\)](#). These guidelines are not based on a consideration of risks related to cancer. Rather, the point of the guidelines is to make sure that exposures to EMFs do not cause electric currents or fields in the body that are stronger than the ones produced naturally by the brain, nerves and heart. EMF exposures in Canadian homes, schools and offices are far below these guidelines.

FOR MORE INFORMATION

- Health Canada’s [Electric and magnetic fields](#) at: www.hc-sc.gc.ca/ewh-semt/radiation/cons/electri-magnet/index-eng.php
- The World Health Organization – Electromagnetic fields and public health:
 - [Exposure to extremely low frequency fields](#) at: www.who.int/mediacentre/factsheets/fs322/en/index.html
 - [Extremely low frequency](#) at: www.who.int/docstore/peh-mf/publications/facts_press/efact/efs205.html
 - [Extremely low frequency fields and cancer](#) at: www.who.int/docstore/peh-emf/publications/facts_press/efact/efs263.html



Health
Canada

Santé
Canada

Your health and
safety... our priority.

Votre santé et votre
sécurité... notre priorité.

Electric and Magnetic Fields

Updated: November 2012

Original: November 2001

IT'S YOUR HEALTH



FOR INDUSTRY AND PROFESSIONALS

- The International Agency for Research on Cancer (IARC) *Volume 80 – Non-ionizing Radiation, Part 1: Static and Extremely Low-Frequency (ELF) Electric and Magnetic Fields* at: <http://monographs.iarc.fr/ENG/Monographs/vol80/volume80.pdf>
- IARC Carcinogen classifications at: <http://monographs.iarc.fr/ENG/Classification/index.php>

RELATED RESOURCES

- Health Canada, *It's Your Health*:
 - Safety of Wi-Fi Equipment at: www.hc-sc.gc.ca/hl-vs/iyh-vsv/prod/wifi-eng.php
 - Safety of Cell Phones and Cell Phone Towers at: www.hc-sc.gc.ca/hl-vs/iyh-vsv/prod/cell-eng.php
- For safety information about food, health and consumer products, visit the [Healthy Canadians](http://www.healthycanadians.gc.ca) website at: www.healthycanadians.gc.ca
- For more articles on health and safety issues go to the *It's Your Health* web section at: www.health.gc.ca/iyh

You can also call toll free at
1-866-225-0709 or TTY at
1-800-267-1245*

Updated: November 2012
Original: November 2001

© Her Majesty the Queen in Right of Canada,
represented by the Minister of Health, 2012

Catalogue: H13-7/70-2012E-PDF
ISBN: 978-1-100-21395-8

Canada



Use this Pamphlet for

This pamphlet outlines the general information and process for facilities applications that do not involve a hearing, such as pipelines that are less than 40 kilometers long, deactivations, reactivations, construction of meter stations, and other small scale projects.

For Further Information

If you are a landowner, the NEB publication *National Energy Board—Landowner Guide* may help you to understand the lifecycle of a pipeline, and the rights of landowners. It discusses regulatory processes administered by the Board, including how concerns about projects can be addressed. For information on the hearing process, please see the publication titled *National Energy Board—Hearing Process Handbook*.

For copies of any NEB publication or for more information, contact us:

- Online: www.neb-one.gc.ca
- Email: info@neb-one.gc.ca
- Toll free: 1-800-899-1265
- Write us or visit our library at:

National Energy Board
Second Floor
517 Tenth Avenue SW
Calgary, Alberta T2R 0A8

National Energy Board
Information for Proposed Pipeline or
Powerline Projects That Do Not Involve a Hearing
Cat. No. NE23-121/1-2013E-PDF
ISBN: 978-1-100-22870-9
November 2013

National Energy
Board



Office national
de l'énergie

Information for Proposed Pipeline or Power Line Projects that Do Not Involve a Hearing



Canada

The Role of the National Energy Board

The National Energy Board (NEB or Board) is an independent federal regulator established to promote safety and security, environmental protection, and economic efficiency in the Canadian public interest. We regulate pipelines, international power lines, energy development and trade. The Board reports to Parliament through the Minister of Natural Resources.

Before a company can develop a pipeline or power line that crosses provincial or international borders, it must apply to the Board and receive its approval. The Board examines whether the project is in the public interest, and then decides whether it should be approved.



The Company's Consultation Program

For most projects, the company is required to conduct a consultation program to communicate with all individuals, groups and agencies that may be affected by the project. The company should involve those who are potentially affected early in the planning and design phases of the project, and respond to concerns or input. Interested groups and individuals should become involved in the public consultation process as early as possible to raise their concerns. Companies should also tell the people it has consulted with when they plan to submit their project application to the Board.

The company's consultation program should continue throughout the planning and design phases of the project and—if the project is approved—during construction, operation and abandonment. The company is also expected to develop plans for ongoing communication during the operation of the project. The Board expects the company to respond to any issues or complaints it might receive through the life of the project.

Becoming Involved and Staying Informed

Anyone who has concerns about a project should contact the company first with those concerns. If you still have concerns at the time the project application is submitted, you are encouraged to write the Board a letter outlining your concerns as soon as possible (preferably within 14 days of the application being submitted). This allows the Board to consider your views when it reviews the company's project application.

How to File your Letter of Comment

For projects that do not go to a hearing, you do not need to submit an application to participate. You may send a letter of comment and it should include:

- your name, mailing address, and phone number;
- the name of your organization, if you represent one;
- the proposed project name;
- comments on why you are interested in the project and how you will be impacted positively or negatively by the project, or what relevant or expert information you can provide; and
- any information that explains or supports your comments.

You may send your letter of comment to the Board (file) in one of three ways:

1. Submit it electronically through the Board's website at www.neb-one.gc.ca under Submit Documents.
2. Send a Fax to:
Secretary of the National Energy Board
Fax: 403-292-5503 or
(toll free fax): 1-877-288-8803
3. Mail a copy of your letter of comment to:
Secretary of the Board
National Energy Board
517 Tenth Avenue SW
Calgary, Alberta T2R 0A8

You must also send a copy of your letter to the company.

Manitoba-Minnesota Transmission Project

We want to hear from you.

Visit our webpage for more information,
register for updates or complete a project survey
at **www.hydro.mb.ca/mmtp**

You can also phone **1-877-343-1631** or email
mmtp@hydro.mb.ca for more information.



www.hydro.mb.ca

Frequently asked questions

How is compensation determined?

For the granting of an easement, landowners are eligible to receive one-time payments for up to four types of compensation:

- Land compensation for the transmission line right-of-way;
- Construction damage compensation for damages caused by construction, operation and maintenance of the transmission line;
- Structure impact compensation for each tower located on agricultural lands;
- Ancillary damage compensation where Manitoba Hydro's use of the right-of-way directly or indirectly impacts the use of the property.

Are landowners eligible for a buyout?

Easements are preferred to allow landowners the ability to continue farm operations. However, in special circumstances, a buyout can be offered to provide compensation to landowners for all related and reasonable relocation costs where the proximity of the transmission line is within 75 m of the landowner's residence.

What are the benefits of a one-time compensation payment?/How was this method of payment arrived at?

The benefits to landowners for one-time compensation payments are:

- Allows the landowner the opportunity to leverage the investment;
- Payment is made regardless of weather or production limitations;

- Payment maximizes exceptional crop management practices;
- Calculation maximizes the one-time payment.

A one-time compensation payment was chosen based on feedback obtained from the following:

- Feedback from previous transmission line projects;
- Public engagement activities;
- Comparisons with other public electric utilities.

As a tenant, what can I expect for compensation from the transmission line?

Tenants may be eligible for construction damage compensation for damages caused by construction of the transmission line.

When can landowners expect to receive payments?

Land compensation will be paid based on the current land values and escalated to 150 per cent of fair market value. A \$225 advance payment will be made at the time of signing the easement with the balance being paid at the time of easement registration at the appropriate Land Titles office.

Structure impact compensation, for towers located on lands classed as agriculture, will be paid once towers are installed and construction is complete.

Ancillary damage compensation will be paid at the time of easement registration at the appropriate Land Titles office, if such damage has occurred.

Construction damage compensation will be identified, negotiated and paid during and/or after towers are installed and construction is complete, if such damage has occurred.

Does Manitoba Hydro have an agricultural biosecurity program?

Manitoba Hydro developed a biosecurity policy in consultation with government and industry. The policy outlines the requirements of employees and contractors who carry out work on cultivated agricultural lands.

For more information, please contact:

Manitoba Hydro Property Department

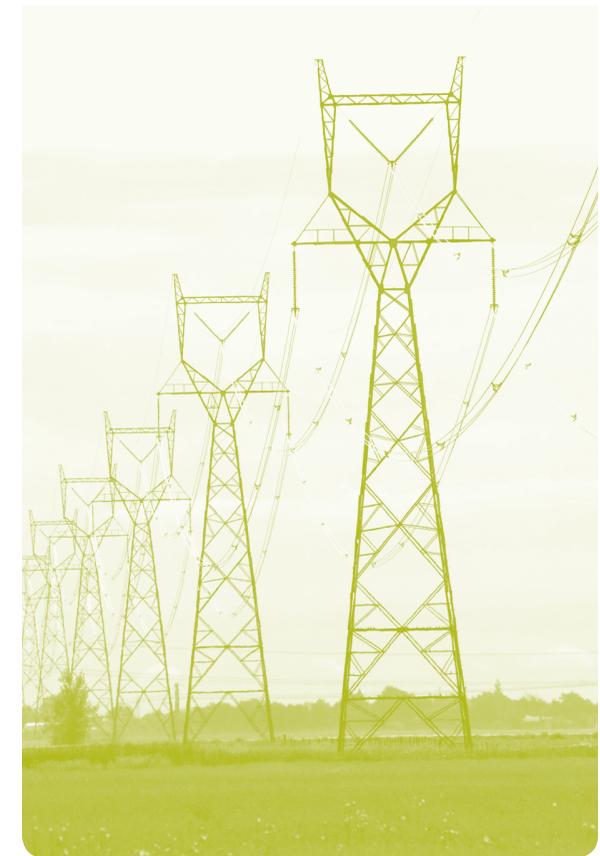
P.O. Box 7950, Station Main
Winnipeg, Manitoba
R3C 0J1

Phone: (In Winnipeg) 204-360-7888;
(toll-free) 1-877-343-1631

Email: mmtp@hydro.mb.ca

For information on the Manitoba-Minnesota Transmission Project, please visit www.hydro.mb.ca/mmtp

Manitoba-Minnesota Transmission Project Landowner Compensation Information



Manitoba-Minnesota Transmission Project Landowner Compensation

Landowners whose properties have the Manitoba Minnesota Transmission line located on or crossing their properties will be compensated. Four types of compensation are available:

- Land Compensation: to landowners granting an easement for the right-of-way;
- Construction Damage Compensation: to landowners for damages caused by construction activities;
- Structure Impact Compensation: to landowners for each tower located on agricultural lands;
- Ancillary Damage Compensation: to landowners where Manitoba Hydro's use of the right-of-way directly or indirectly impacts the use of the property.

Land Compensation

In Manitoba, rights-of-way for transmission lines are normally obtained by way of easement. Land compensation is a one-time payment to landowners for granting of an easement for a transmission line right-of-way.

The following factors are used to determine land compensation:

- Total area (acres) of easement required by Manitoba Hydro for the transmission line right-of-way;
- The current market value of the land (per acre);

- The easement compensation factor, which is determined based on the size and type of the transmission line. For the 500-kilovolt (kV) Manitoba-Minnesota Transmission Line, the easement compensation factor is 150 per cent of the current market value that will be certified by the Land Value Appraisal Commission of Manitoba.

For example, if the easement area required for the 500-kV transmission line is 1,609 metres (m) long and 80 m wide, the total area of the easement is approximately 31.81 acres. If the land is assessed at \$2,300 per acre, the following compensation formula will apply:

$$\begin{aligned} & \$2,300 \text{ (current market value per acre)} \\ & \times 150 \text{ per cent (easement compensation factor)} \\ & \times 31.81 \text{ (acres)} = \$109,745. \end{aligned}$$

Construction Damage Compensation

Construction damage compensation is provided to landowners who experience damage to their property due to the construction, operations and maintenance of the transmission line. A one-time payment for construction damage is negotiated on a case-by-case basis. Manitoba Hydro will:

- Compensate or be responsible for repairing, to the satisfaction of the landowner, any damage to a landowner's property;
- Compensate a landowner for damages such as the reapplication or rejuvenation of compacted top soil where the remedial work requires farm machinery and the expertise of the landowner.

In the instance of damage to cultivated agricultural lands, a landowner would be compensated as follows:

If crops were in place prior to the construction of the transmission line, the crop owner will be compensated for the amount of loss due to damage. This compensation is based on the current value of the harvested crop (Manitoba Agricultural Services Corporation [MASC] insured value in dollars per bushel), multiplied by the acres of damaged area and multiplied by the crop owner's yield of that same crop (based on MASC Area bushels per acre yield).

The following compensation formula will apply:

$$\begin{aligned} & \$7.48 \text{ per bushel for 2013: Red Spring Wheat} \times 4.25 \\ & \text{(acres damaged)} \times 55.7 \text{ (bushels per acre yield)} = \$1,771. \end{aligned}$$

Structure Impact Compensation

Structure impact compensation is a one-time payment to landowners for each transmission tower placed on land classed as agricultural. Structure impact compensation covers:

- Crop losses on lands permanently removed from production;
- Reduced productivity in an area of overlap around each tower structure;
- Additional time required to manoeuvre farm machinery around each structure;
- Double application of seed, fertilizer and weed control in the area of overlap around each tower structure.

Structure impact compensation takes into consideration:

- the four types of agricultural lands;
- the type of tower structure constructed on the land;
- the location of the tower structure in relation to property lines.

Manitoba Hydro prepares a compensation schedule semi-annually based on current data provided by MASC. For example, for a tower structure with a base size of approximately 10 m x 10 m (in accordance with the current (June 2013) compensation schedule) the compensation rates are:

- Natural hay land/\$6,640 each;
- Seeded hay land/\$12,730 each;
- Cereal crop land (wheat, canola)/\$17,930 each;
- Row crop land (corn and potatoes)/\$25,520 each.

Assuming the land is classed as cereal crop land and one mile of transmission line with four towers is to be located on the property (the average space between towers is 400 m), the compensation would be:

$$\begin{aligned} & \$17,930 \text{ (structure payment)} \\ & \times 4 \text{ (number of structures)} = \$71,720. \end{aligned}$$

Ancillary Damage Compensation

Ancillary damage compensation is a one-time payment when Manitoba Hydro's use of the right-of-way directly or indirectly impacts the use of the property. Ancillary damage compensation is negotiated. Landowners may be compensated for the following:

- Agricultural impacts such as irrigation and drainage;
- Constraint impacts such as restricted access to adjacent lands;
- Traditional impacts such as highest and best use of land.



Manitoba-Minnesota Transmission Project

Round 1 – Public Engagement Alternative Routes & Potential Border Crossings

What is it?

Manitoba Hydro is proposing construction of a 500-kilovolt (kV) alternating current (AC) transmission line from the Dorsey Station to the international border between Manitoba and Minnesota. Known as the Manitoba-Minnesota Transmission Project, this line is needed to export surplus electricity and enhance the reliability of the province's electricity supply in emergency and drought situations.

The project also includes upgrades to associated stations at Dorsey, Riel and Glenboro. The anticipated in-service date for the project is 2020.

Where is it?

The Manitoba-Minnesota Transmission Project will originate at the Dorsey Converter Station, located near Rosser, northwest of Winnipeg, and travel south around Winnipeg along what is known as the Southern Loop corridor. (Please see map on page three.) From southeast Winnipeg, the transmission line will continue south crossing the Manitoba-Minnesota border at one of the border crossing locations currently under consideration. (Please see map on pages four and five.) It will then connect to the Great Northern Transmission Line, which will be constructed by Minnesota Power, and ultimately terminate at the Blackberry Station located northwest of Duluth, Minnesota.

Part of Manitoba Hydro's plan to meet future electricity needs

Electricity use in Manitoba is projected to grow by 1.6 per cent annually (80 megawatts per year) over the next two decades. New sources of electricity will be needed to supply the province by 2023.

To meet this need, Manitoba Hydro is continuing a path of investing in predominantly hydro generation with enhanced access to export markets.

Specifically, Manitoba Hydro's development plan includes:

- construction of the 695-megawatt Keeyask Generating Station on the Nelson River;
- construction of the 1,485-megawatt Conawapa Generating Station;
- construction of domestic AC transmission facilities associated with the future Keeyask and Conawapa generating stations;
- a new Manitoba to U.S. transmission interconnection, the Manitoba-Minnesota Transmission Project, to provide additional capacity for new export sales, allow for imports during droughts and enhance reliability;
- expansion of electricity exports.

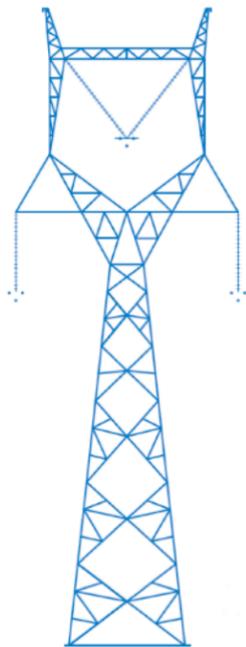
What will the line look like?

The Manitoba-Minnesota Transmission Project will use steel lattice towers. A self-supporting design will be used in cultivated agricultural areas and guyed structures (see illustrations below) will be used in all other terrain. The design will:

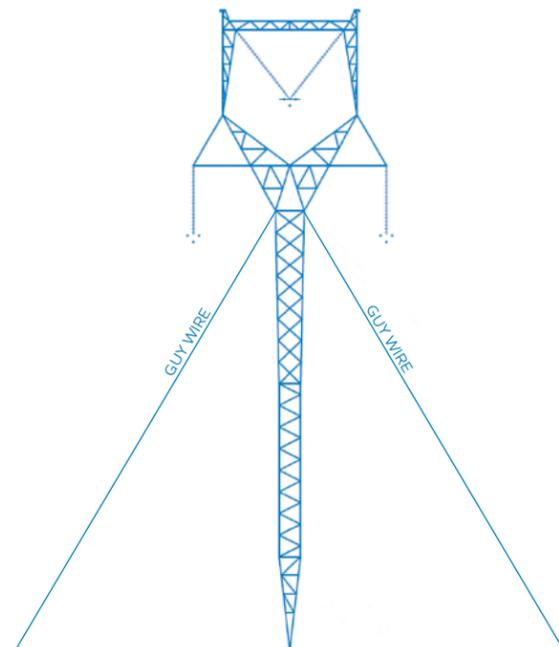
- range from 40 to 60 metres (130 to 200 feet) in height.
- be spaced 400 to 500 metres (1,300 to 1,650 feet) apart (on average).
- utilize a right-of-way width of 80 to 100 metres (260 to 330 feet).

Additional information on tower design and more detailed specifications will be provided in later rounds of the project's environmental assessment process.

Preliminary tower design parameters



500-kV Self-Supporting Lattice Steel Tower
(Towers are not drawn to scale — conceptual only.)



500-kV Guyed Suspension Steel Tower
(Angle of guy wires depicted on tower are not accurate — conceptual only.)

Why does Manitoba Hydro import and export power?

Manitoba Hydro exports surplus electricity that results from normal operation of a hydroelectric system. Revenue from these export sales helps to keep rates low in Manitoba. In 2012–13, for example, Manitoba Hydro's electricity export sales totalled \$353 million with 88 per cent derived from the U.S. market and 12 per cent from Canadian markets.

U.S. utilities who purchase our electricity want long-term price certainty and stability. These utilities see value in purchasing hydroelectricity from Manitoba Hydro through long-term fixed contracts that are not linked to volatile natural gas prices or subject to future changes in regulatory requirements associated with air emissions.

The Manitoba-Minnesota Transmission Project will serve a 250-megawatt (MW) power sale with Minnesota Power and will provide increased access to additional markets in the U.S.

Adding a second 500-kV interconnection will also increase Manitoba Hydro's ability to import electricity, strengthening the reliability of the province's electricity supply. In times of extreme drought or an unforeseen outage, transmission interconnections to other utilities provide access to electricity needed to meet demand in Manitoba.

Route selection and environmental assessment processes

Manitoba Hydro is developing potential transmission line routes for discussion with the public. Our approach includes early stakeholder input and takes into account engineering considerations as well as the built and natural environment. This approach is based on the EPRI – GTC (Electric Power Research Institute – Georgia Transmission Corporation) Methodology.

The project will require a Class 3 Licence under *The Environment Act* (Manitoba) and National Energy Board authorization.

The environmental assessment for the project will include:

- study area characterization through field work and background investigation;
- public engagement to obtain input and feedback into route selection;
- assessment of potential environmental and socio-economic effects;
- assessment of cumulative effects;
- development of mitigation measures and monitoring plans;
- development of an environmental protection program;

It is anticipated the environmental impact statement will be submitted to regulatory authorities in spring 2015.

Southern Loop transmission corridor



The Southern Loop is a dedicated transmission corridor that will accommodate multiple transmission lines necessary for system reliability and to help to meet future energy demands.

Located between the Dorsey Converter Station (near Rosser) and the Riel Station (east of Winnipeg), the transmission corridor follows the western and southern boundaries of the City of Winnipeg.

Manitoba Hydro has been acquiring property rights for the Southern Loop for many years. Placing the Manitoba-Minnesota transmission line in this corridor reduces the number of independent rights-of-way on the landscape.

Manitoba-Minnesota Transmission Project

Project Infrastructure

- Alternative Route
- Potential Border Crossing
- Alternative Route Study Area

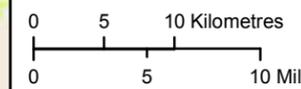
Infrastructure

- Converter Station
- Southern Loop Transmission Corridor

Landbase

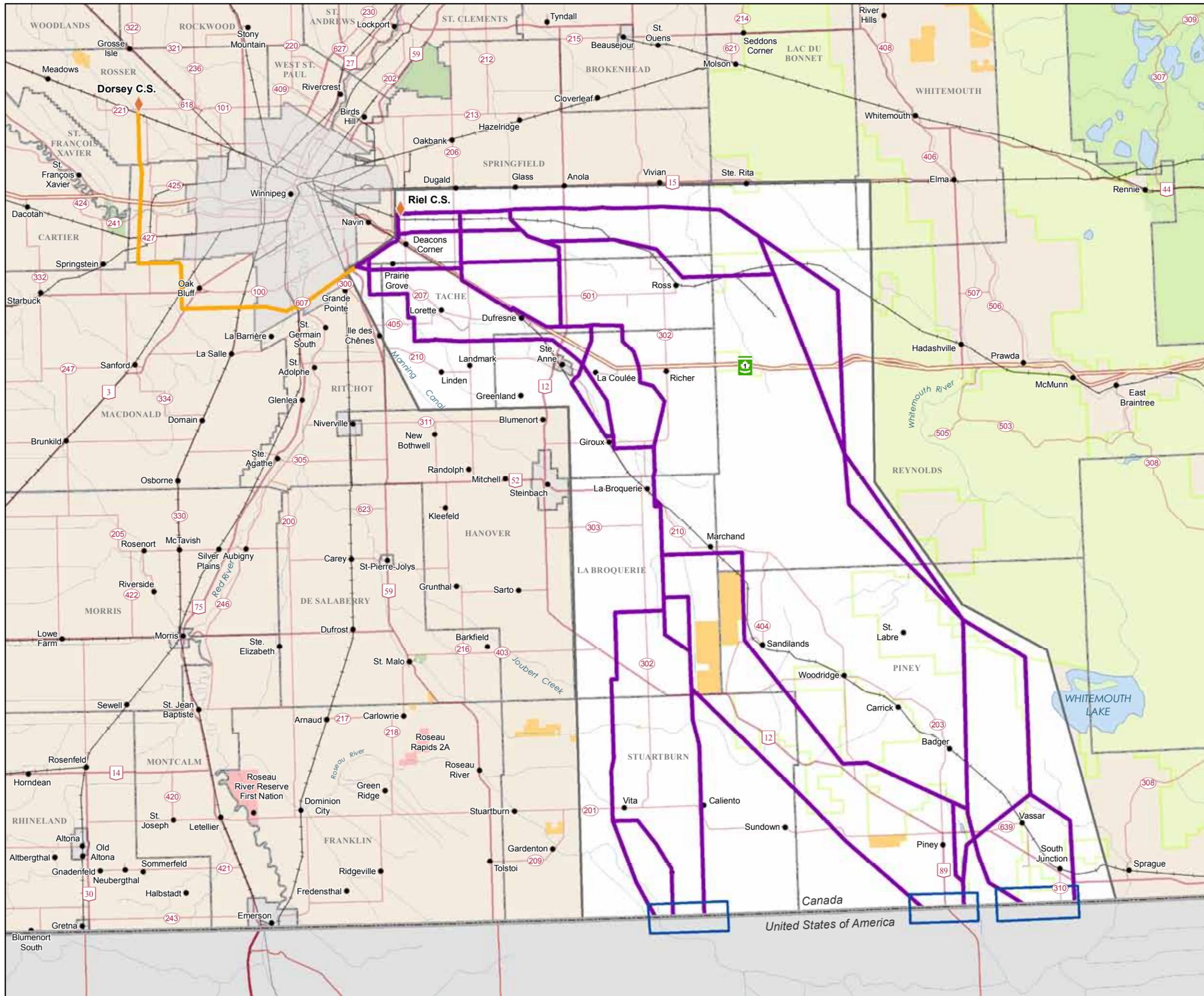
- Community
- Trans Canada Highway
- Provincial Highway
- Provincial Road
- Railway
- City / Town
- Rural Municipality
- First Nation
- Wildlife Management Area
- Provincial Park
- Provincial Forest
- Watercourse
- Waterbody

Coordinate System: UTM Zone 14N NAD83
 Data Source: MBHydro, ProvMB, NRCAN
 Date Created: October 21, 2013



1:500,000

Alternative Routes



Project timelines

We are here.

Round 1

- Alternative routes and proposed border crossings: October to February 2014.

Round 2

- Preferred border crossing with refined alternative routes: March 2014 to July 2014.
-

Round 3

- Preferred route: October 2014 to December 2014.
-

Anticipated next steps

- Environmental Impact Statement (EIS) Filing: Spring 2015.
- Regulatory review process: early 2015 to mid-2016.
- Licence decision: mid-2016.
- Construction: 2016 to 2020.
- In-service date: 2020.



Why do we have surplus electricity?

Manitoba Hydro's generating stations are designed to produce electricity even when the water supply is equal to the lowest flows on record. This is called dependable flow. Building to dependable flow ensures we're capable of meeting our electricity commitments to our Manitoba customers.

Most of the time, water flows are well above this dependable flow level. In fact, in almost every year since 1900, our water supply has produced more electricity than is required in the province. Export sales provide an outlet for this excess electricity and a revenue stream that helps keep energy prices low in the province.

Who is Minnesota Power?

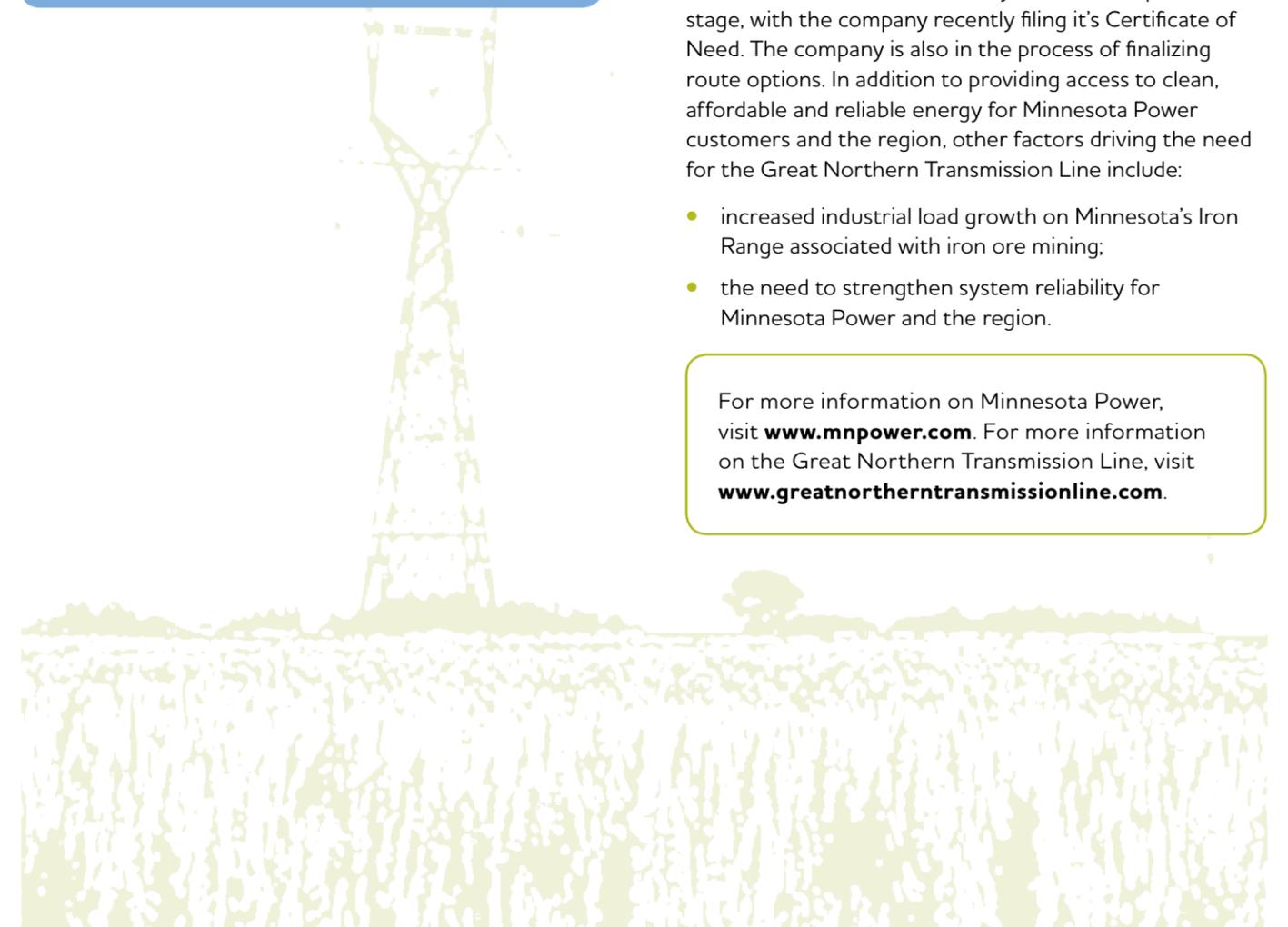
Minnesota Power is a private utility company based in Duluth, Minnesota that provides electricity to a 67,000 square kilometre electric service area in the northeastern part of that state. It supplies retail electric service to 144,000 customers and wholesale electric service to 16 municipalities.

In 2011, Minnesota Power signed a long-term agreement to purchase 250-MW of electricity from Manitoba Hydro. This will allow Minnesota Power to increase the renewable resources in their energy portfolios, while providing price stability that natural gas-fuelled sources cannot. Purchasing power from Manitoba Hydro will also allow Minnesota Power to replace energy supplied by coal-fired generating stations that will be retired in the next decade and meet increased load growth. The utility is willing to build a new transmission interconnection in Minnesota to be able to do so.

This proposed transmission interconnection, named the Great Northern Transmission Line, would run from the Manitoba-U.S. border to the Mesabi Iron Range near Duluth, Minnesota. It is currently in the development stage, with the company recently filing its Certificate of Need. The company is also in the process of finalizing route options. In addition to providing access to clean, affordable and reliable energy for Minnesota Power customers and the region, other factors driving the need for the Great Northern Transmission Line include:

- increased industrial load growth on Minnesota's Iron Range associated with iron ore mining;
- the need to strengthen system reliability for Minnesota Power and the region.

For more information on Minnesota Power, visit www.mnpower.com. For more information on the Great Northern Transmission Line, visit www.greatnortherntransmissionline.com.



How can you be involved?

Manitoba Hydro will seek input from local landowners, First Nations, the Manitoba Métis Federation, local municipalities, stakeholder groups, government departments and the general public during the route selection and environmental assessment process.

The goals for the Manitoba-Minnesota Transmission Project public engagement process are to:

- share project information as soon it becomes available;
- obtain feedback for use in the route selection and environmental assessment processes;
- gather and understand local interests and concerns;
- integrate interests and concerns into the routing and assessment processes;
- review potential mitigation measures.

We will meet these goals by:

- involving the public throughout the route selection and environmental assessment stages.;
- providing clear, timely and relevant information and responses;
- delivering a public engagement process that is adaptive and inclusive;
- informing the public as to how their feedback influenced the project;
- documenting and reporting on feedback.

Meetings, open houses, workshops and a range of other methods will provide opportunities for interested groups and individuals to participate in the route selection and environmental impact assessment.



We would like to hear from you.

Please contact:

Licensing & Environmental Assessment Department
Phone (Toll-free) 1-877-343-1631,
(in Winnipeg) 204-360-4305, or
email: mmtp@hydro.mb.ca

Visit www.hydro.mb.ca/mmtp for up-to-date information on the Manitoba-Minnesota Transmission Project and to register for updates.

For more on Manitoba Hydro's development plan visit www.hydro.mb.ca.



Manitoba-Minnesota Transmission Project

Quick Facts

What is the Manitoba-Minnesota Transmission Project?

An import and export transmission line and upgrades to three electrical stations.

Why do we need it?

The transmission line will allow Manitoba Hydro to send electricity to markets in the United States and allow Manitoba Hydro to receive electricity during emergencies or years with low water.

Where is it?

The transmission line will start at Rosser, Manitoba and will go around the south of Winnipeg. The line will then travel to the Manitoba-Minnesota border south of the town of Piney. Minnesota Power will build a transmission line called the Great Northern Transmission Line, which will connect to the Manitoba-Minnesota Transmission Project.

What will it look like?

Towers will be around 40 to 60 metres (m) or (130-120 feet (ft.)) in height and will need a right-of-way of 80 to 100 m or (260 to 330 ft.). The diagrams show what the towers will look like.

How much will it cost?

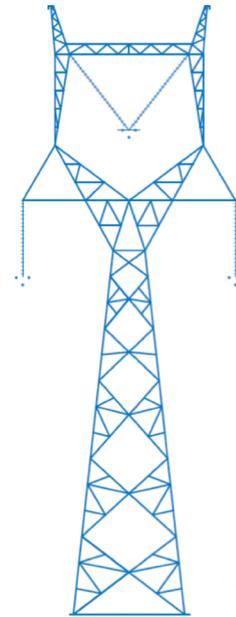
The Manitoba-Minnesota Transmission Project will cost an estimated \$350 million.

When will it be built?

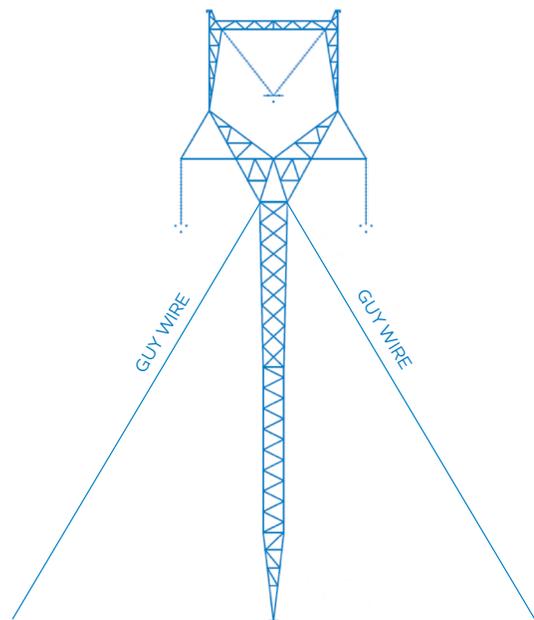
Manitoba Hydro plans to start construction in 2017 and finish the work in 2020.

Preliminary tower design

(Towers are not drawn to scale — conceptual only.)



500-kV Self-Supporting Lattice Steel Tower



500-kV Guyed Suspension Steel Tower



How will we share information with the public?

Manitoba Hydro will gather feedback about the transmission line's route. We have a webpage with project information and a project phone line and email address. We will also hold public and community open houses to share information.

What is an environmental assessment?

Manitoba Hydro will look at what effects the project might cause to the environment and how to lessen the effects. This information will be put in a report and provided to the government.

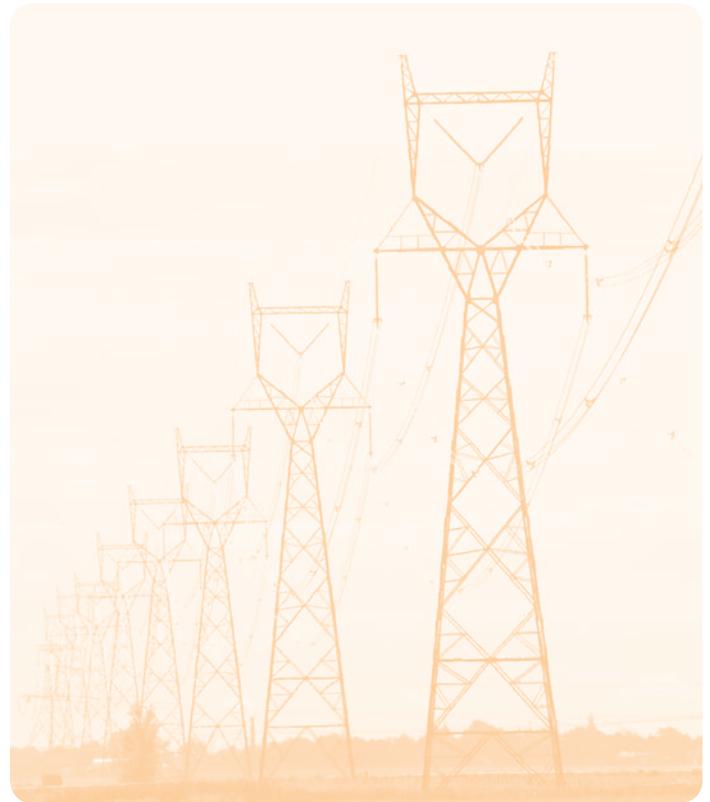
Who decides if the project is built?

The report will be reviewed by the government of Canada (National Energy Board) and the Province of Manitoba and they will then decide if the project should be built. They will look at our report in spring 2015.

Want more information?

Detailed project information you can find on Manitoba Hydro's website at www.hydro.mb.ca/mmtp. If you want to talk to Manitoba Hydro about the Manitoba-Minnesota Transmission Project please contact us at:

- Phone (toll-free): **1-877-343-1631**;
- Phone (in Winnipeg): **204-360-7888**;
- Email: mmtp@hydro.mb.ca



Why does Manitoba Hydro export and import power?

Manitoba Hydro exports surplus electricity that results from normal operation of a hydroelectric system.

Revenue from these export sales helps to keep rates low in Manitoba. In 2012–13, for example, Manitoba Hydro's electricity export sales totalled \$353 million with 88 per cent derived from the U.S. market and 12 per cent from Canadian markets.

U.S. utilities who purchase our electricity want long-term price certainty, stability and renewable hydropower. These utilities see value in purchasing hydroelectricity from Manitoba Hydro through long-term fixed contracts that are not linked to volatile natural gas prices or subject to future changes in regulatory requirements associated with air emissions.

The Manitoba-Minnesota Transmission Project will serve a 250-megawatt (MW) power sale with Minnesota Power and will provide increased access to additional markets in the U.S.

Adding a second 500-kV interconnection will also increase Manitoba Hydro's ability to import electricity, strengthening the reliability of the province's electricity supply. In times of extreme drought or an unforeseen outage, transmission interconnections to other utilities provide access to electricity needed to meet demand in Manitoba.



We would like to hear from you.

Please contact:

Licensing & Environmental Assessment Department
Phone (Toll-free) 1-877-343-1631,
(in Winnipeg) 204-360-7888, or
email: mmtp@hydro.mb.ca

Visit www.hydro.mb.ca/mmtp for up-to-date information on the Manitoba-Minnesota Transmission Project, complete an online survey and to register for Project updates..

For more on Manitoba Hydro's development plan visit www.hydro.mb.ca/development.

Manitoba-Minnesota Transmission Project

Round 2 - Preferred border crossing and refined alternative routes

What is it?

Manitoba Hydro is proposing construction of a 500-kilovolt (kV) alternating current (AC) transmission line from the Dorsey Station to the international border between Manitoba and Minnesota. Known as the Manitoba-Minnesota Transmission Project, this line is needed to export surplus electricity and enhance the reliability of the province's electricity supply in emergency and drought situations.

The project also includes associated upgrades to stations at Dorsey, Riel and Glenboro. The anticipated in-service date for the project is 2020.

Where is it?

The Manitoba-Minnesota transmission line will originate at the Dorsey Converter Station, located near Rosser, northwest of Winnipeg, and travel south around Winnipeg. From southeast Winnipeg, the transmission line will continue south crossing the Manitoba-Minnesota border south of Piney, Manitoba. It will then connect to the Great Northern Transmission Line, which will be constructed by Minnesota Power. The Great Northern Transmission Line will terminate at the Blackberry Station located northwest of Duluth, Minnesota.

What's new?

Preferred border crossing and refined alternative routes

During the first round of public engagement, a number of alternative segments were presented and feedback on these segments was collected from participants and study team specialists. Once the first round of public engagement was completed, routes were evaluated and compared. Complete routes to each border crossing were evaluated on the basis of reliability, community considerations, schedule, cost and the natural and built environments. A preferred border crossing south of Piney, Manitoba was selected in negotiation with Minnesota Power. Following this determination, alternative routes were then refined.

For more information regarding the route selection process, please speak with a Manitoba Hydro representative or visit www.hydro.mb.ca/mmtp and click on "Environmental Assessment and Route Selection".

What will the line look like?

The Manitoba-Minnesota Transmission Project will use steel lattice towers. A self-supporting tower design will be used in cultivated agricultural areas and a guyed structure design (see illustrations) will be used in most other terrain.

The project will include:

- towers typically ranging from approximately 40 to 60 metres (m) (130 to 200 feet (ft.)) in height;
- tower spacing of 400 to 500 m (1,300 to 1,650 ft.) apart (on average);
- a right-of-way width of 80 m (260 ft.) for self-supporting towers and 100 m (330 ft.) for guyed structures.

What are the goals of the public engagement process?

During the route selection and environmental assessment process, Manitoba Hydro seeks input from local landowners, First Nations, the Manitoba Métis Federation (MMF), local municipalities, stakeholder groups, government departments and the general public. Opportunities for participation include open houses, meetings, workshops and Manitoba Hydro's website.

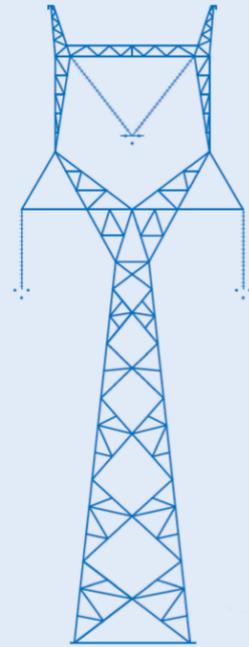
The public engagement goals for the Manitoba-Minnesota Transmission Project are to:

- share project information;
- obtain feedback for use in the route selection and environmental assessment process;
- gather and understand local interests and concerns;
- integrate interests and concerns into the routing and assessment processes;
- review potential mitigation measures.

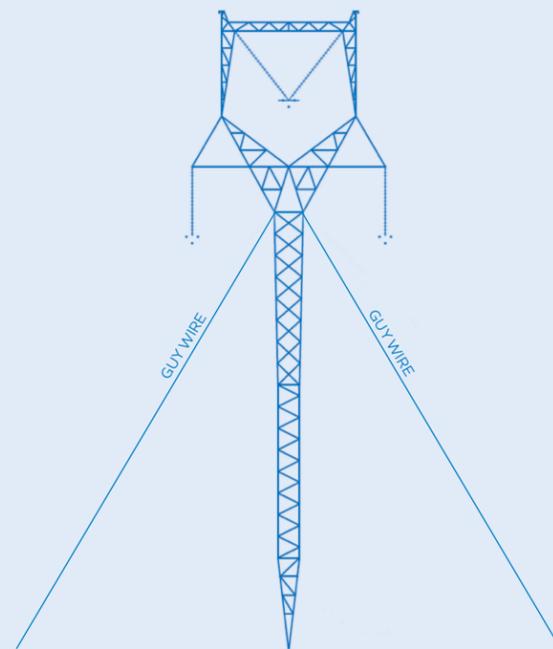
Manitoba Hydro will meet these goals by:

- involving the public throughout the route selection and environmental assessment processes;
- providing clear, timely and relevant information and responses;
- delivering a public engagement process that is adaptive and inclusive;
- informing the public of how their feedback influenced the project;
- documenting and reporting on feedback received.

Preliminary tower design



500-kV Self-Supporting Lattice Steel Tower



500-kV Guyed Suspension Steel Tower

(Towers are not drawn to scale — conceptual only.)

The environmental assessment processes

The Manitoba-Minnesota Transmission Project will require a Class 3 Licence under *The Environment Act* (Manitoba) and National Energy Board authorization. The environmental impact statement for the project will include:

- documentation of public engagement activities;
- characterization of the environment;
- identification and analysis of potential effects on people and the environment;
- determination of ways to avoid or reduce potential adverse effects.

As we approach a preferred route for the project, the environmental assessment will become more focused. Manitoba Hydro will continue to collect information and conduct site visits to understand and reduce impacts on the local environment.

It is anticipated that the environmental impact statement will be submitted to regulatory authorities in spring 2015.

What's next?

Information gathered during this round of public engagement will assist in the identification of a preferred route. In the fall of this year, the preferred route will be presented to the public for review and comment. There will also be an opportunity to discuss mitigation measures that will reduce potential effects of the project. Manitoba Hydro will continue to meet and discuss the project with the public, stakeholder groups, municipalities, First Nations, the MMF and interest groups.

We will continue to:

- inform the public regarding the project, timelines and route selection process;
- utilize a variety of mechanisms to receive and share information with interested individuals;
- conduct field surveys and assessment on the local environment to assist in the determination of a preferred route;
- discuss the refined alternative routes;
- provide the public with opportunity to have their questions answered and concerns addressed by Manitoba Hydro representatives.

Engagement and project timelines

Round 1

- Alternative routes and proposed border crossings: October to February 2014.

Round 2

- Refined alternative routes and preferred border crossing – March 2014 to July 2014.

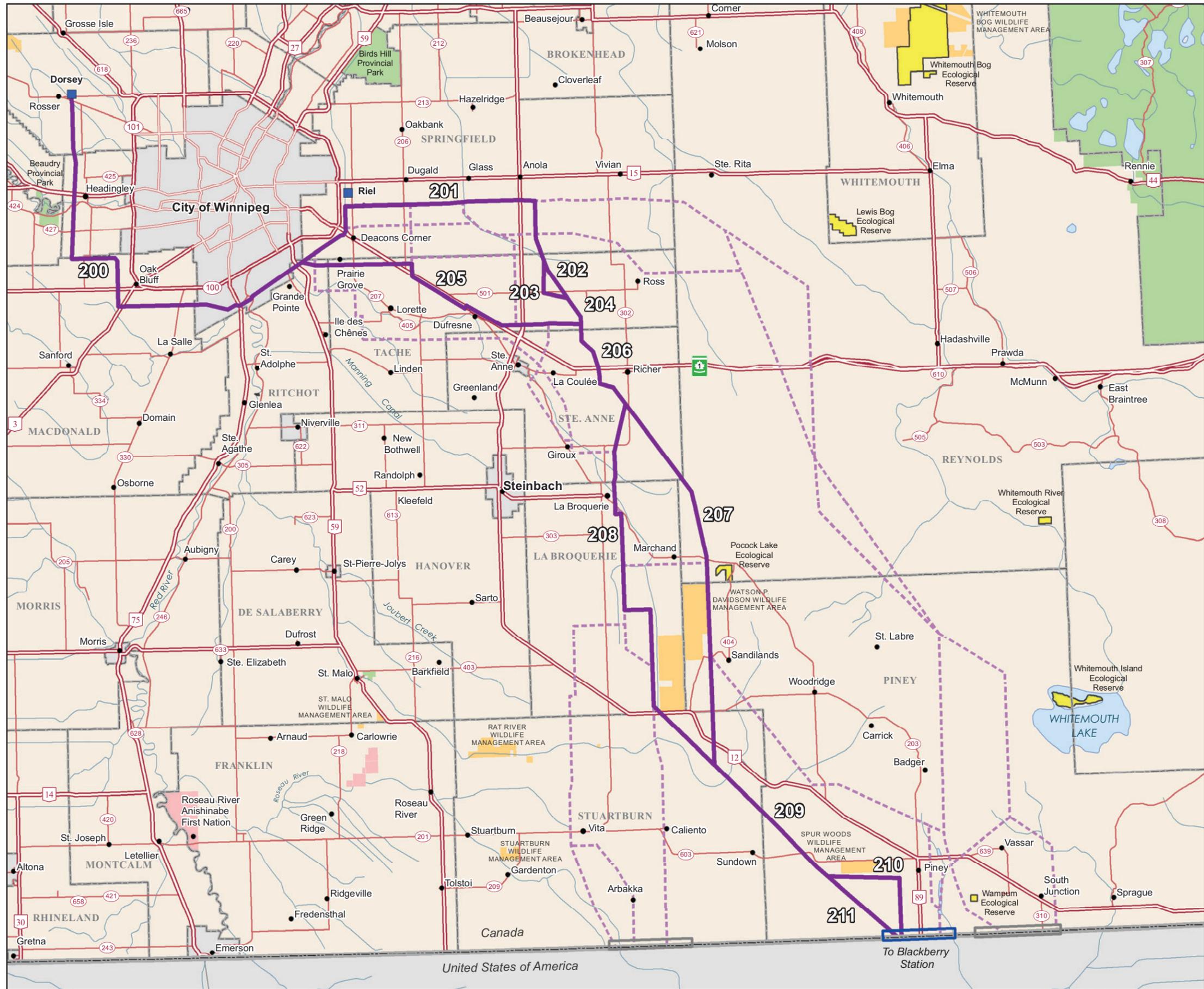
Round 3

- Preferred route: October 2014 to December 2014.

Anticipated next steps

- Environmental Impact Statement (EIS) Filing: spring 2015.
- Regulatory review process: early 2015 to 2016.
- Licence decision: 2016.
- Construction: 2016 to 2020.
- In-service date: 2020.

We are here.



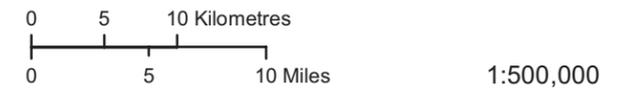
Manitoba-Minnesota Transmission Project

- Project Infrastructure**
- 200 Refined Alternative Route (Segment Number)
 - - - Alternative Route (Round 1)
 - Preferred Border Crossing
 - Former Border Crossing Option

- Infrastructure**
- Converter Station

- Landbase**
- Community
 - Trans Canada Highway
 - Provincial Highway
 - Provincial Road
 - City / Town
 - First Nation
 - Rural Municipality
 - Ecological Reserve
 - Wildlife Management Area
 - Provincial Park
 - Watercourse
 - Waterbody

Coordinate System: UTM Zone 14N NAD83
 Data Source: MBHydro, ProvMB, NRCAN
 Date Created: March 27, 2014



Refined Alternative Routes and Preferred Border Crossing

What we heard - Round 1

Manitoba Hydro held public open houses, meetings and workshops to gather information on routing criteria as well as feedback on route segments.

The following table presents some of the most frequent comments or concerns heard throughout Round 1 (including phone and email).

Comment/Concern	How the comments/concerns were addressed
Proximity to cities, towns, villages and rural residential development	Locations of urban centres and rural residential areas are a major consideration in refining routes.
Proximity to individual residences and farmsteads	This is a major consideration in transmission line routing. Transmission line corridors avoid residences to the greatest extent possible.
Perceived health effects due to electric and magnetic fields (EMF)	These concerns will be addressed in the environmental assessment process. Information from Health Canada, the World Health Organization and other international health entities is provided in the public engagement process. These sources state that no scientific evidence suggests that exposure to EMF will cause any negative health effects on humans, vegetation and wild or domestic animals. For more information on EMFs go to www.hydro.mb.ca/safety/emf/index.shtml .
Loss of high-quality farm land	While routing considers the value of these lands based on crop production and soil classification, avoidance is not always possible. To reduce the potential effects on agriculture, the preference is to align the route on the half-mile line or parallel to other linear features. Self-supporting towers with a smaller footprint are used in agricultural areas to lessen the effect on crop production.
Avoid aerial applicator airstrips.	Locations of airstrips were identified in the early planning phases and will be avoided where possible in route selection.
Compensation for private landowners	Manitoba Hydro provides a one-time compensation payment for transmission line easements as well as a one-time tower payment related to loss of annual production. Manitoba Hydro also compensates landowners for any damages related to construction and operation.
Avoid sacred, historical and heritage sites, including Centennial Farms.	Heritage resources, including archaeological resources, are identified as part of the route planning process and are avoided where possible. This information will continue to be collected and considered as project planning proceeds.
Potential impacts on land available for future Treaty Land Entitlement (TLE) selections	Manitoba Hydro encourages communities to share information about potential future TLE selection. This information will be considered in the site selection and environmental assessment processes.

Comment/Concern	How the comments/concerns were addressed
Parallel existing transmission lines	Paralleling of transmission lines was considered as part of route selection. The refined alternative routes utilize paralleling options where possible.
Locate transmission line infrastructure adjacent to linear infrastructure such as provincial and municipal highways and roads and drains to reduce land requirements.	Existing linear features were identified in the route selection process and used as routing opportunities where possible. With 500-kV transmission lines, towers cannot be placed immediately adjacent to the edge of road allowances. Alignment with roads may not always be possible when infield placement of towers is necessary for reliability reasons. Routing does consider drains as possible alignments.
Concerns about use of herbicides	Manitoba Hydro does not use herbicides for right-of-way clearing. For right-of-way maintenance, an integrated vegetation management program reduces the amount of herbicide required.
Stream crossings can impact riparian habitat	Riparian zones of streams and rivers are important habitat and are considered in route selection. As a result, vegetation buffer zones are protected at watercourse crossing areas.
Potential impact on wildlife habitat for bears, deer, birds, including vegetation, riparian areas and wetlands	The environmental assessment process identifies potential sensitivities and prescribes appropriate mitigation measures. Statistics describing potential environmental impacts were evaluated to assist in refining alternative routes.
Environmental degradation and reduced opportunities for hunting, trapping, gathering of berries and medicinal plants	The environmental assessment process identifies potential sensitivities. Manitoba Hydro will work with communities to identify sensitive sites important to the community and will consider specific mitigation or construction scheduling to reduce effects
ATV access and hunting in wilderness areas	Manitoba Hydro will work with local authorities to manage access along rights-of-way once a final route is selected. Increased access in natural areas is a consideration in route selection.

1 How does Manitoba Hydro make routing decisions?

Each stage of route selection includes route planning, feedback and analysis, and comparative evaluation. Our evaluation of route alternatives uses three broad perspectives- the built (human) environment, the natural environment, and the technical (engineering) environment. Balancing these perspectives throughout each routing decisions minimizes the overall impact of the project on people and the environment. Manitoba Hydro's route decision making process is based on a methodology called the EPRI-GTC methodology and a separate handout is available for a more detailed description.

2 Why are some new segments being considered while others have been eliminated?

A key objective of Round 1 was to gather information about land use and landscape characteristics to enable the selection of a border crossing and to refine alternative routes to be presented in Round 2.

Once a border crossing was selected, the information gained during Round 1 from a variety of stakeholders, open houses and the environmental assessment process was used to help route planners to refine or eliminate existing routes and develop potential new route alternatives to the border crossing near Piney, MB. In some cases, the route segments that were considered in Round 1 were determined to effectively balance the three perspectives in routing (natural, built, engineering), and were retained. In some cases they did not and were eliminated. New segments and refinements to existing segments were added to provide alternatives that achieve the routing objective of connecting the start and end point of the project.

3 Are there health effects related to electric and magnetic fields?

Manitoba Hydro acknowledges the concern of health effects related to transmission line development. As part of the Environmental Impact Statement, electric and magnetic fields (EMF) are reviewed and analyzed. Manitoba Hydro will design the transmission line to meet international standards and guidelines set forth by the ICNIRP (International Commission on Non-Ionizing Radiation Protection). These guidelines have been adopted by Health Canada and the World Health Organization. Manitoba Hydro provides information through meetings and through the website to assist in individuals' research on the topic:

- Manitoba Hydro Website <https://www.hydro.mb.ca/safety/emf/index.shtm>
- Manitoba Hydro's Alternating Current Brochure
- Manitoba Hydro's Alternating Current and Electronics Brochure
- Health Canada Handout "It's Your Health"
- Manitoba Clean Environment Commission "Consensus Statement on Electric and Magnetic Fields"

4 What are the potential effects of transmission lines on property values?

Current research suggests that property values will not be impacted with the presence of a transmission line and Manitoba Hydro continues to monitor property values around other transmission projects.

5 What does an environmental assessment consist of?

Environmental Impact Assessment (EIA) is a formal evaluation of potential effects of projects on people and the environment. Manitoba Hydro is currently conducting an EIA for the proposed MMTP project.

The EIA approach consists of a number of steps leading to the creation of an Environmental Impact Statement (EIS) which summarizes the results of the environmental assessment work conducted on the project. The EIS is required by regulators and is the main document reviewed during licensing and permitting processes. Mitigation measures are developed to minimize or eliminate potential effects identified in the EIA.

Further information on the environmental assessment process can be found in the Project newsletter and on the Project website.

6 How is public feedback incorporated into route selection and the environmental assessment?

Public input is collected throughout the route selection process and is considered by the project team along with information collected throughout the environmental assessment process. Site specific issues and concerns are documented, and route alterations are brought forward to the project team. This information assists in the understanding of the local landscape and is considered in the decision making process.

Information and feedback is used in the environmental assessment process for studying the various biophysical and socio-economic components of the environment. Issues are identified and site specific information on wildlife, land use, heritage, and other components are collected. This data assists in focusing the environmental assessment, the evaluation of potential effects, and the identification of appropriate mitigation measures.

7 Access to the right-of-way is a concern. How does Manitoba Hydro address access?

Manitoba Hydro obtains an easement for a transmission line right-of-way. The easement provides Manitoba Hydro access for construction, inspection, maintenance, and emergency events. Ownership of the land remains with the current landowner. The landowner can work with Manitoba Hydro to implement measures to limit access to or on the right-of-way. Fencing (with gate) and signage, supplied and installed by Manitoba Hydro, are the most common forms of restricting access to the right-of-way on private property.

8 Next Steps & Opportunities for Participation

The public is encouraged to provide feedback and be involved throughout the environmental assessment and route determination processes being undertaken for the Project. Feedback can be provided through various mechanisms including: meetings, emails, letters, comment sheets, or phone calls, and can be provided at any time to be considered in the decision making processes.

Upcoming opportunities for public input in the environmental assessment process include:

Round 3 (Winter 2014): A Preferred Route will be determined and local feedback and knowledge will be collected to assist in the refinement of the route to determine a Final Preferred Route.

Submission to Manitoba Conservation and Water Stewardship (Spring/Summer 2015): Upon filing of the Environmental Impact Statement, Manitoba Conservation and Water Stewardship (MCWS) will provide a public review period where the EIS can be commented on and questions asked. This will assist in their licensing decision.

Manitoba Clean Environment Commission (to be determined by Minister of MCWS): If a public hearing is called, submissions to the Commission, in form of written or oral evidence, can be made to assist in their review of the Project. The Commission will then make a recommendation to Manitoba Conservation and Water Stewardship which will assist in the licensing decision.

National Energy Board (date pending): This federal review body will also review the Environmental Impact Statement. They may also review the findings of both Manitoba Conservation and Water Stewardship and the Manitoba Clean Environment Commission to assist in their decision making. They will also allow for submissions from members of the public to assist in their decision making process.

Manitoba Hydro requires approval from both Manitoba Conservation and Water Stewardship and the National Energy Board to proceed with the Project. It is also important to note that this Project, as part of Manitoba Hydro's Preferred Development Plan, recently was part of the "Needs For And Alternatives To (NFAT)" hearing undertaken by the Public Utilities Board.

Manitoba-Minnesota Transmission Project

We want to hear from you.

Visit our webpage for more information,
register for updates or complete a project survey
at www.hydro.mb.ca/mmtp

You can also phone **1-877-343-1631** or email
mmtp@hydro.mb.ca for more information.



Manitoba-Minnesota Transmission Project

What are your thoughts and perspectives on these valued components?

Feedback you provide can assist in evaluating Valued Components and developing monitoring/protection plans.

Feedback received by engaging First Nations, Metis and the public as well as Traditional Knowledge studies, will help us to develop a better environmental impact statement.

Biophysical Valued Components

The Manitoba-Minnesota Transmission Project (MMTP) is a transmission line that would send electricity to the United States and allow Manitoba Hydro to receive electricity during emergencies.

Manitoba Hydro will assess what potential effects the project might cause to the environment and how to avoid or lessen those effects. One way to do this is to determine Valued Components (VCs). VCs are elements of the environment that are valued by people and help focus the environmental impact statement. There are biophysical, socio-economic and cultural VCs. The Biophysical VCs identified for the MMTP include:

- Wildlife and Wildlife Habitat
- Vegetation and Wetlands
- Fish and Fish Habitat



Wildlife and Wildlife Habitat

Examples of wildlife being assessed are **black bear, elk** and **sharp-tailed grouse**. Both traditional knowledge and technical evaluations are underway to better understand potential project effects, including:

- Population dynamics;
- Habitat changes.

What are possible mitigation measures?

- Avoidance of known den and calving areas during construction;
- Timing of construction.



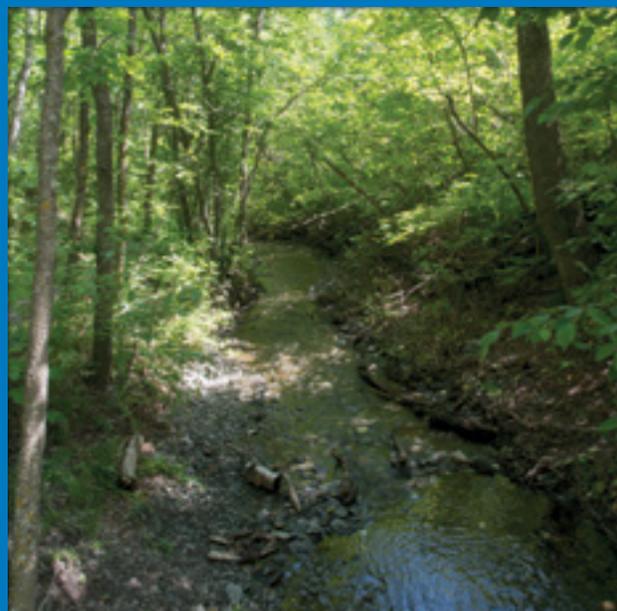
Vegetation and Wetlands

Vegetation and wetlands are an essential part of the ecosystem and are used by First Nations, Metis and the public. Both traditional knowledge and technical evaluations are underway to better understand potential project effects on vegetation and wetlands, including:

- Abundance and locations of rare plants, such as orchids and tall grass prairie;
- Increase access to plant harvest areas;

What are possible mitigation measures?

- Species of concern will be identified and monitored, and the use of herbicides will be restricted in these areas.
- Vegetation buffers waterbodies.
- Existing access roads and trails will be used where possible.



Manitoba Hydro is interested in hearing from you regarding our environmental assessment.

- Call us at **1-877-343-1631**;
- Email us at **mmtp@hydro.mb.ca**;
- Or talk to one of our representatives at a meeting.





Manitoba-Minnesota Transmission Project

Round 3 - Preferred Route

What is it?

Manitoba Hydro is proposing construction of a 500-kilovolt (kV) alternating current (AC) transmission line from the Dorsey Converter Station to the international border between Manitoba and Minnesota. Known as the Manitoba-Minnesota Transmission Project, this line is needed to export surplus electricity and enhance the reliability of the province's electricity supply in emergency and drought situations.

The project also includes associated upgrades to stations at Dorsey, Riel and Glenboro. The anticipated in-service date for the project is 2020.

Where is it?

The Manitoba-Minnesota Transmission Project will originate at the Dorsey Converter Station, located near Rosser, northwest of Winnipeg, and travel south around Winnipeg.

From southeast Winnipeg, the transmission line will continue south crossing the Manitoba-Minnesota border south of Piney, Manitoba. It will then connect to the Great Northern Transmission Line, which will be constructed by Minnesota Power.

The Great Northern Transmission Line will terminate at the Iron Range Station located northwest of Duluth, Minnesota.

What's new?

Preferred route

Based on feedback received through public engagement and environmental assessment processes, a preferred route has been determined. This preferred route aims to minimize impact on people and the environment.

Manitoba Hydro is presenting this preferred route to the public to gather feedback to help finalize the route and to complete an environmental assessment to present to regulators in summer of 2015. Public feedback will assist in:

- discipline specialists undertaking their assessments;
- determining the final placement of the transmission line;
- determining mitigation measures to minimize the potential impacts on people and the environment.

For more information regarding the route selection or environmental assessment processes, please speak with a Manitoba Hydro representative or visit www.hydro.mb.ca/mmtp and click on "Environmental Assessment and Route Selection".

What will the line look like?

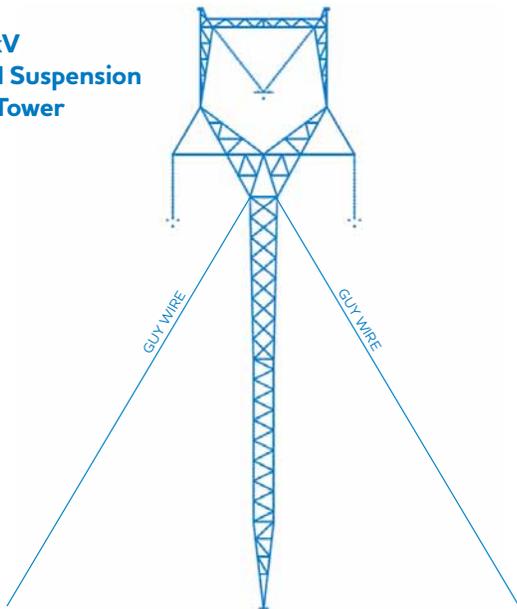
The Manitoba-Minnesota Transmission Project will use steel lattice towers. A self-supporting tower design will be used in cultivated agricultural areas and a guyed structure design (see below illustrations) will be used in most other terrain.

The project will include:

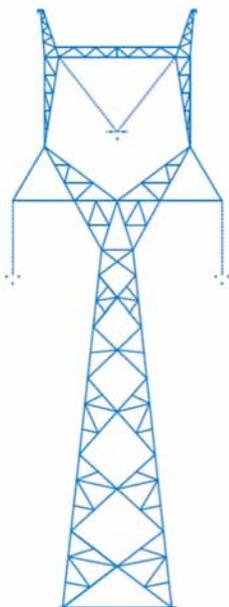
- towers typically ranging from 40 to 60 metres (m) (130 to 200 feet (ft.)) in height;
- tower spacing of 400 to 500 m (1,300 to 1,650 ft.) apart on average;
- a right-of-way width of 80 m (260 ft.) for self-supporting towers and 100 m (330 ft.) for guyed structures.

Preliminary tower design

**500-kV
Guyed Suspension
Steel Tower**



**500-kV
Self-Supporting
Lattice Steel
Tower**



(Towers are not drawn to scale — conceptual only.)

What are the goals of the engagement process?

During the route selection and environmental assessment processes, Manitoba Hydro seeks input from local landowners, First Nations, Metis, local municipalities, stakeholder groups, government departments and the general public. Opportunities for participation include open houses, meetings and Manitoba Hydro's website.

The public engagement goals for the Manitoba-Minnesota Transmission Project are to:

- share project information;
- obtain feedback for use in the route selection and environmental assessment process;
- gather and understand local interests and concerns;
- integrate interests and concerns into the routing and assessment processes;
- review potential mitigation measures.

Manitoba Hydro will meet these goals by:

- involving the public throughout the route selection and environmental assessment processes;
- providing clear, timely and relevant information and responses;
- delivering a public engagement process that is adaptive and inclusive;
- informing the public of how their feedback influenced the project;
- documenting and reporting on feedback received.

The environmental assessment processes

An environmental impact statement (EIS) will be developed for the project and submitted for regulatory review and approval. The EIS will outline the project's potential impacts and provide mitigation measures to minimize potential impact to people and the environment.

The EIS for the Manitoba-Minnesota Transmission Project will include:

- documentation of engagement activities;
- characterization of the environment;
- identification and analysis of potential effects on people and the environment;
- mitigation measures to avoid or reduce potential adverse effects.

For more information visit www.hydro.mb.ca/mmtp and click on "Environmental Assessment and Route Selection".

Regulatory review process

The Manitoba-Minnesota Transmission Project will require a Class 3 Licence under *The Environment Act* (Manitoba) and federal authorization through the National Energy Board (NEB). The environmental impact statement (EIS) will be completed to meet federal requirements by the NEB and under *The Canadian Environmental Assessment Act, 2012*. Review of the EIS will also be undertaken by various branches of both provincial and federal government as outlined below:

Provincial

- **Manitoba Conservation and Water Stewardship (MCWS):** The EIS will be submitted to MCWS for review as a Class 3 development under *The Environment Act* (Manitoba). Following submission to MCWS, a public review period will begin and the EIS will be open for review and comment.

Federal

- **National Energy Board (NEB):** This project is an international power line and will require authorization from the NEB. The NEB will include a public comment period.

For more information, visit www.hydro.mb.ca/mmtp and click on "Regulatory".

Engagement and Project timelines

Round 1

- Alternative routes and proposed border crossings: October to March 2014.

Round 2

- Refined alternative routes and preferred border crossing – March 2014 to December 2014.

Round 3

- Preferred route: January to May 2015.

Anticipated next steps

- Environmental Impact Statement (EIS) filing: summer 2015.
- Regulatory review process: summer 2015 to 2016.
- Licence decision: 2017.
- Construction: 2018 to 2020.
- In-service date: 2020.

What we heard - Round 2

Manitoba Hydro has gathered feedback on the project through public open houses, workshops and meetings as well as phone calls, emails and letters.

The most frequent comments or concerns heard throughout Round 2 are presented below:

Comment/Concern	How the comments/concerns were addressed
Proximity to individual residences and farmsteads.	Proximity is a consideration in transmission line routing and Manitoba Hydro will avoid residences to the greatest extent possible.
Environmental degradation and reduced opportunities for hunting, trapping, and gathering of berries and medicinal plants as well as potential impacts to culturally significant areas.	The environmental assessment and public engagement processes identify potential sensitivities. Manitoba Hydro will identify sensitive sites and will consider specific mitigation or construction scheduling to minimize potential effects.
Perceived health effects due to electric and magnetic fields (EMF).	Manitoba Hydro will design and maintain exposure levels from the transmission lines to those below guidelines set forth by the International Commission on Non-Ionizing Radiation Protection. These guidelines have been adopted by the World Health Organization and Health Canada.
ATV access and hunting in wilderness areas and private lands.	Manitoba Hydro will work with local authorities to manage access along rights-of-way once a final route is selected and will work with landowners who wish to implement measures to limit access to the right-of-way.
The value of private property in close proximity to a transmission line could decrease.	The environmental assessment will assess potential for impact on property value. Current research suggests that property values will not be impacted by the presence of the transmission line.
Future and approved subdivision plans for private property.	Through the routing and public engagement processes, Manitoba Hydro aims to capture the locations of these subdivisions so they can be considered in decision making. Smaller subdivided lots are avoided where possible.
Compensation for private landowners.	Manitoba Hydro provides a one-time compensation payment for transmission line easements as well as a one-time tower payment related to loss of annual production. Manitoba Hydro also compensates landowners for any damages related to construction and operation.
Potential impacts on land available for future Treaty Land Entitlement (TLE) selections.	Manitoba Hydro encourages communities to share information about potential future TLE selection. This information will be considered in the route selection and environmental assessment processes.

To date, we have received over 2,000 comments regarding the Manitoba–Minnesota Transmission Project via meetings, open house, email and phone calls. We will continue to gather feedback, which will be documented in the environmental impact statement and then submitted to regulators in the summer of 2015.

Preferred route determination

Manitoba Hydro is using a process based on the EPRI-GTC (Electric Power Research Institute – Georgia Transmission Corporation) Transmission Line Siting Methodology. This process aims to balance various perspectives on the landscape and to determine a preferred route for the project.

Round 1

- Feedback on alternative segments provided throughout Round 1 , and develop additional route segments for consideration
- 700,000-plus routing options
- Alternative route evaluation
- Top routes to border crossings compared
- Final comparison of routes to determine strengths and weaknesses
- Border crossing negotiation based on feedback through route comparison

Round 2

- Border crossing and refined alternative routes determined
- Compile feedback from engagement and environmental assessment processes
- Develop additional route segments for consideration
- 500,000-plus routing options
- Alternative route evaluation
- Final comparison with top five routes
- Modifications to mitigate outstanding concerns

Round 3

- Final route determined

Public engagement process

The public engagement process aims to collect feedback throughout the route determination and environmental assessment processes. The feedback received is important in the assessment work being undertaken and in determining the final placement of the transmission line.

Rounds 1 and 2 provided various ways in which the public, First Nations, Metis and stakeholder groups could participate and provide feedback. Open houses, meetings, workshops, a project email address and a toll-free information line gathered various perspectives and comments regarding the project.

Round 3 will focus on the following:

- Assisting in finalizing the preferred route;
- Outlining the contents of the EIS, including what is being assessed;
- Discussing mitigation measures to minimize potential impacts;
- Informing the public of the regulatory review process;
- Answering questions and addressing concerns.

First Nation and Metis engagement

Manitoba Hydro is working with First Nation and Metis to provide information about the project and share ideas on how to mitigate concerns brought forward. Our engagement process is adaptive and uses various methods to meet the information needs of the participants including community open houses, community information sessions, Elders gatherings, leadership meetings and routing workshops.

First Nations and Metis who indicated an interest in the Project have been invited to submit proposals to undertake self-directed traditional knowledge studies. Manitoba Hydro aims to help communities better understand current and historical land use of the area, and identify sensitive sites that may have historical, cultural, or sacred value.

What's next?

Information and feedback gathered during this round will be compiled and considered to develop a final preferred route and assist in the environmental assessment activities being undertaken.

Following the determination of the final preferred route and the development of the environmental impact statement (EIS), Manitoba Hydro will submit the EIS for regulatory approval from both provincial and federal agencies. The regulatory review process also includes public comment periods where members of the public can become involved in the review of the EIS.

We will continue to:

- inform the public regarding the project, timelines and the regulatory review process;
- utilize a variety of mechanisms to receive and share information with interested individuals;
- conduct field surveys and complete an assessment on the local environment to assist in the final placement of the transmission line;
- discuss the mitigation measures to minimize impact on people and the environment.



We would like to hear from you.

Please contact: Licensing & Environmental Assessment

- Phone (toll-free) 1-877-343-1631;
(in Winnipeg) 204-360-7888;
- email: mmtp@hydro.mb.ca;
- Visit www.hydro.mb.ca/mmtp for up-to-date information on the Manitoba-Minnesota Transmission Project, to complete an online survey or register for Project updates.

1 How does Manitoba Hydro make routing decisions?

Each stage of route selection includes route planning, feedback and analysis, and comparative evaluation. Our evaluation of route alternatives uses three broad perspectives - the built (human) environment, the natural environment, and the technical (engineering) environment. Balancing these perspectives throughout each routing decisions minimizes the overall impact of the project on people and the environment. Manitoba Hydro's route decision making process is based on a methodology called the EPPI-GTC methodology and a separate handout is available for a more detailed description.

2 Why are some new segments being considered while others have been eliminated?

A key objective of the public engagement process is to gather information about land use and landscape characteristics. This information as well as information provided by discipline specialists has enabled the selection of a border crossing, the refinement of alternative routes and now the determination of a preferred route.

The information gained during Rounds 1 & 2 from a variety of stakeholders, open houses and the environmental assessment process was used to help route planners refine or eliminate existing routes and develop potential new route alternatives to the border crossing near Piney, MB. In some cases, the route segments that have been presented were determined to effectively balance the three perspectives in routing (natural, built, engineering), and were retained. In some cases they did not and were eliminated.

3 Are there health effects related to electric and magnetic fields?

Manitoba Hydro acknowledges the concern of health effects related to transmission line development. As part of the Environmental Impact Statement, electric and magnetic fields (EMF) are reviewed and analyzed. Manitoba Hydro will design the transmission line to meet international standards and guidelines set forth by the ICNIRP (International Commission on Non-Ionizing Radiation Protection). These guidelines have been adopted by Health Canada and the World Health Organization. Manitoba Hydro provides information through meetings and through the website to assist in individuals' research on the topic.

- Manitoba Hydro website: www.hydro.mb.ca/safety/emf/index.shtml
- Manitoba Hydro's Alternating Current Brochure
- Manitoba Hydro's Alternating Current and Electronics Brochure
- Health Canada Handout "It's Your Health" Manitoba
- Manitoba Clean Environment Commission "Consensus Statement on Electric and Magnetic Fields"

4 What are the potential effects of transmission lines on property values?

Current research suggests that property values will not be impacted with the presence of a transmission line. Manitoba Hydro continues to monitor property values around other transmission projects.

5 What does an environmental assessment consist of?

Environmental Impact Assessment (EIA) is a formal evaluation of potential effects of projects on people and the environment. Manitoba Hydro is currently conducting an EIA for the proposed MMTP project.

An Environmental Impact Statement (EIS) summarizes the results of the environmental assessment work conducted on the project. The EIS is required by regulators and is the main document reviewed during licensing and permitting processes. Mitigation measures are developed to minimize or eliminate potential effects identified in the EIA.

Further information on the environmental assessment process can be found in the Project newsletter and on the Project website.

6 How is public feedback incorporated into route selection and the environmental assessment?

Public input is collected throughout the route selection process and is considered by the project team along with information collected throughout the environmental assessment process. Site specific issues and concerns are documented, and route alterations are brought forward to the project team. This information assists in the understanding of the local landscape and is considered in the decision making process.

Information and feedback is used in the environmental assessment process for studying the various biophysical and socio-economic components of the environment. Issues are identified and site specific information on wildlife, land use, heritage, and other components are collected. This data assists in focusing the environmental assessment, the evaluation of potential effects, and the identification of appropriate mitigation measures.

7

Access to the right-of-way is a concern. How does Manitoba Hydro address access?

Manitoba Hydro obtains an easement for a transmission line right-of-way. The easement provides Manitoba Hydro access for construction, inspection, maintenance, and emergency events. Ownership of the land remains with the current landowner. The landowner can work with Manitoba Hydro to implement measures to limit access to or on the right-of-way. Fencing (with gate) and signage, supplied and installed by Manitoba Hydro are the most common forms of restricting access to the right-of-way on private property.

8

Next Steps & Opportunities for Participation

The public is encouraged to provide feedback and be involved throughout the environmental assessment and route determination processes being undertaken for the Project. Feedback can be provided through various mechanisms including: meetings, emails, letters, comment sheets, or phone calls, and can be provided at any time.

Upcoming opportunities for public input in the environmental assessment process include:

Round 3 (Early 2015): A Preferred Route will be presented and local feedback and knowledge will be collected to assist in the refinement of the route to determine a Final Preferred Route.

Submission to Manitoba Conservation and Water Stewardship (Summer 2015): Upon filing of the Environmental Impact Statement, Manitoba Conservation and Water Stewardship (MCWS) will provide a public review period where the EIS can be commented on and questions asked. This will assist in their licensing decision.

Manitoba Clean Environment Commission hearing (to be determined by Minister of MCWS):

If a public hearing is called, submissions to the Commission, in form of written or oral evidence, can be made to assist in their review of the Project. The Commission will then make a recommendation to Manitoba Conservation and Water Stewardship which will assist in the licensing decision.

National Energy Board (NEB): The NEB will review the Environmental Impact Statement. They may also review the findings of both Manitoba Conservation and Water Stewardship and the Manitoba Clean Environment Commission to assist in their decision making. (Date pending.)

Manitoba Hydro requires approval from both Manitoba Conservation and Water Stewardship and the National Energy Board to proceed with the Project. It is also important to note that this Project, as part of Manitoba Hydro's Preferred Development Plan, recently was approved by the Public Utilities board to proceed with an environmental assessment as part of the "Needs for and Alternatives to (NFAT) hearing undertaken in 2014.

9

When is the transmission line considered final?

As outlined in question number eight, there are many venues for the public to provide their feedback into the final routing decision. Information and feedback received from the public and discipline specialists received during Round 3 of the public engagement process will assist in determining Manitoba Hydro's Preferred Route to submit to regulators.

The route will not be deemed final until an Environment Act Licence has been issued by Manitoba Conservation and Water Stewardship and the Project receives approval from the National Energy Board.

During construction there is the possibility that tower placement and small route modifications could occur based on terrain, the location of other existing infrastructure, archaeological finds or other currently unknown constraints.

Manitoba-Minnesota Transmission Project

We want to hear from you.

Visit our webpage for more information,
register for updates or complete a project survey
at www.hydro.mb.ca/mntp

You can also phone **1-877-343-1631** or email
mntp@hydro.mb.ca for more information.

Manitoba-Minnesota Transmission Project

What are your thoughts and perspectives on these valued components?

Feedback you provide can assist in evaluating Valued Components and developing monitoring/protection plans.

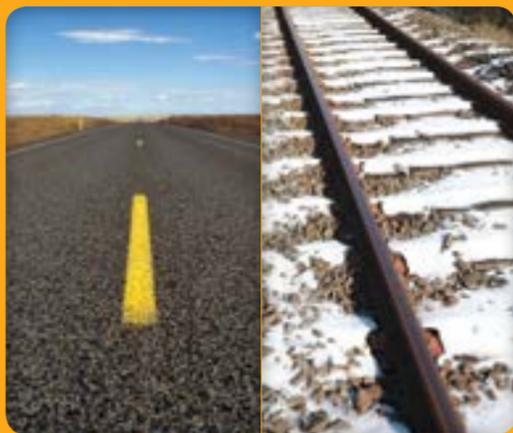
Feedback received by engaging First Nations, Metis and the public as well as Traditional Knowledge studies, will help us to develop a better environmental impact statement.

Socio-Economic Valued Components

The Manitoba-Minnesota Transmission Project (MMTP) is a transmission line that would send electricity to the United States and allow Manitoba Hydro to receive electricity during emergencies.

Manitoba Hydro will look at what effects the project might cause the environment and how to avoid or lessen those effects. One way to do this is to determine Valued Components (VCs). VCs are elements of the environment that are valued by people and reviewed as part of an environmental impact statement. There are physical, biological, socio-economic and cultural VCs. The socio-economic VCs identified for the MMTP include:

- Traditional Land and Resource Use;
- Heritage Resources;
- Infrastructure and Services;
- Employment, Business Opportunities and Economy;
- Agriculture;
- Land and Resource Use;
- Community Health and Well Being;
- Human and Ecological Health.



Examples of Socio-Economic VCs include:

Heritage Resources

Manitoba Hydro aims to protect and preserve natural environments, cultural landscapes, and heritage resources that may be affected by the Project.

We are also undertaking predictive modeling to understand:

- where there is potential to find heritage resources;
- determine the location of sites that are not readily seen.

We will continue to gather feedback and Traditional Knowledge from the First Nations, Metis, provincial/federal departments and the public to determine potential effects and design mitigation measures appropriately.

What are possible mitigation measures?

- During construction, the Project Archaeologist will work with the Construction Supervisor and Site Manager to ensure that staff is informed of and understand the process of implementing heritage protection measures and *The Heritage Resources Act*.
- Development of a Construction Heritage Resource Protection Plan.



Areas identified as heritage, historical, cultural or sacred sites through Aboriginal Traditional Knowledge will be considered sensitive and measures will be taken towards greater protection.

Resource Use

Resource use is valued by commercial operators, hunters, trappers and the general public as either a source of primary income, supplementary income, recreational pursuit and/or way of life. Resource activity assessed includes: forestry, mining, quarrying, hunting, fishing, trapping, and recreation.

We will engage with First Nations and the Metis to understand resource use in the area under consideration for the Preferred Route for the project.

We will assess potential:

- disruptions of resource use activities,
- changes to hunting, fishing and trapping for both recreational and commercial activities.



Through Aboriginal Traditional Knowledge and traditional land use knowledge, the assessment team will be able to better predict potential impacts on practices such as trapping and fishing and prescribe appropriate mitigation measures.

Employment, Business Opportunities and Economy

Employment, business opportunities and economy are important to the lives and livelihood of local and provincial residents and business owners.

We will assess:

- Employment and unemployment levels;
- Education;
- Earnings;
- Cost of living;
- Labour markets in the area; and
- Other economic indicators.



Data will be gathered primarily through desktop review but will also be supported by key person interviews and public commentary to understand changes in the economic environment in local communities.

Manitoba Hydro is interested in hearing from you regarding our environmental assessment.

- Call us at **1-877-343-1631**;
- Email us at **mmtp@hydro.mb.ca**;
- Or talk to one of our representatives at a meeting.



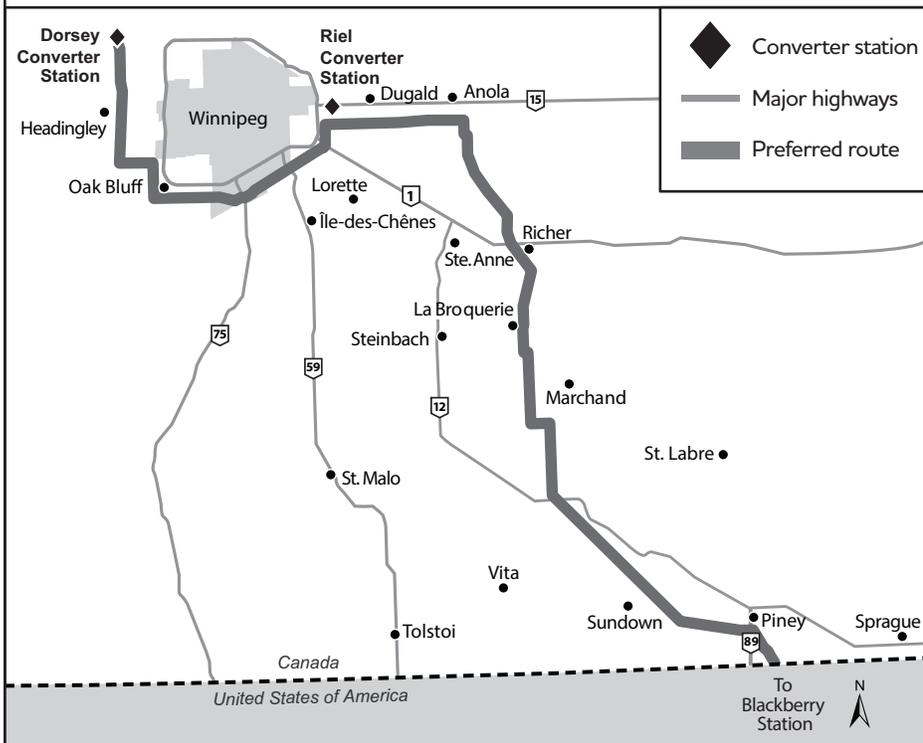
We want to hear from you.

Manitoba-Minnesota Transmission Project

Manitoba Hydro is proposing to construct a 500-kilovolt transmission line from Winnipeg to Minnesota to sell surplus power and enhance the reliability of supply in Manitoba in times of drought or emergency.

With the environmental assessment and public feedback received to date, **Manitoba Hydro is presenting the preferred route for review.**

Open houses will be held at the locations listed to the right. All are welcome and refreshments will be served.



Zhoda

Tuesday, February 10, 3 to 8 p.m.
Zhoda Community Centre
Corner of Road No. 16 & Balla Road

Piney

Wednesday, February 11, 3 to 8 p.m.
Piney Community Centre
Hwy. 89 (Main Street)

Winnipeg

Thursday, February 12, 3 to 8 p.m.
Holiday Inn Winnipeg South
1330 Pembina Hwy.

La Broquerie

Tuesday, February 17, 3 to 8 p.m.
La Broquerie Arena Hall
35 Normandeau Bay

Ste. Anne

Tuesday, February 24, 3 to 8 p.m.
Seine River Banquet Centre
80A Arena Rd.

Headingley

Wednesday, March 4, 3 to 8 p.m.
Headingley Community Centre
5353 Portage Ave.

Oak Bluff

Thursday, March 5, 3 to 8 p.m.
Oak Bluff Recreation Centre
101 MacDonald Rd.

Richer

Wednesday, March 11, 3 to 8 p.m.
Richer Young at Heart Community Club
Dawson Road at Hwy. 302

Dugald

Thursday, March 12, 3 to 8 p.m.
Dugald Community Club
544 Holland St.

Find more project information or sign up for project email updates at: www.hydro.mb.ca/mmtp

You can also phone **1-877-343-1631** or email mmtp@hydro.mb.ca

RE-POWERING Our Province

 **Manitoba
Hydro**

Manitoba-Minnesota Transmission Project

How will we protect the environment?

Manitoba Hydro will look at potential effects the project might have and will document ways to avoid or lessen potential effects to people and the environment. The project team will work with feedback and determine ways to protect the environment if the project is built.

How does your feedback help?

Feedback we get will help the project team in determining where the line will be placed and will help in understanding the potential effects the project may have on people and the environment.

How are we working with First Nations and Metis?

Manitoba Hydro is working with First Nations and Metis to include traditional knowledge in the environmental assessment process. The knowledge shared will help determine potential effects of the project on the environment and will help determine ways to lessen or avoid those potential effects.

Who decides if the project is built?

The report will be reviewed by the government of Canada (National Energy Board) and the Province of Manitoba. They will then decide if the project will be approved. They will start looking at our report in summer 2015.

What is it?

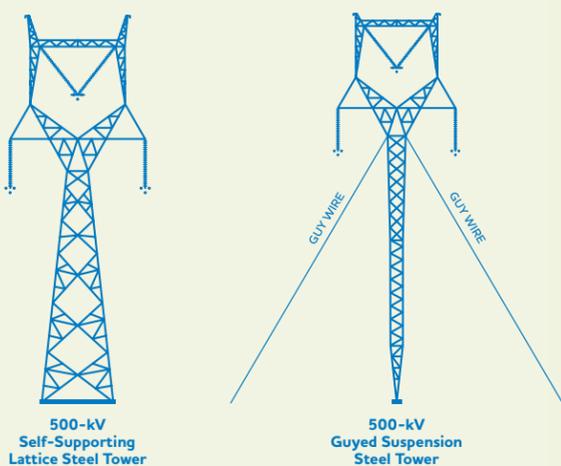
The Manitoba-Minnesota Transmission Project (MMTP) is a transmission line that would send electricity to the United States and allow Manitoba Hydro to receive electricity during emergencies.

Why do we need it?

The transmission line would improve the Manitoba Hydro system as well as allow Manitoba Hydro to sell more power to the United States.

What will it look like?

Towers would be around 40 to 60 metres (m) or 130 to 200 feet (ft.) in height and would need a right-of-way of 80 to 100 m or 260 to 330 ft.



Preliminary tower design

(Towers are not drawn to scale — conceptual only)

What is an environmental impact statement?

Manitoba Hydro will look at what effects the project might cause to the environment and how to avoid or lessen those effects. This information will be put in a report and provided to the government.

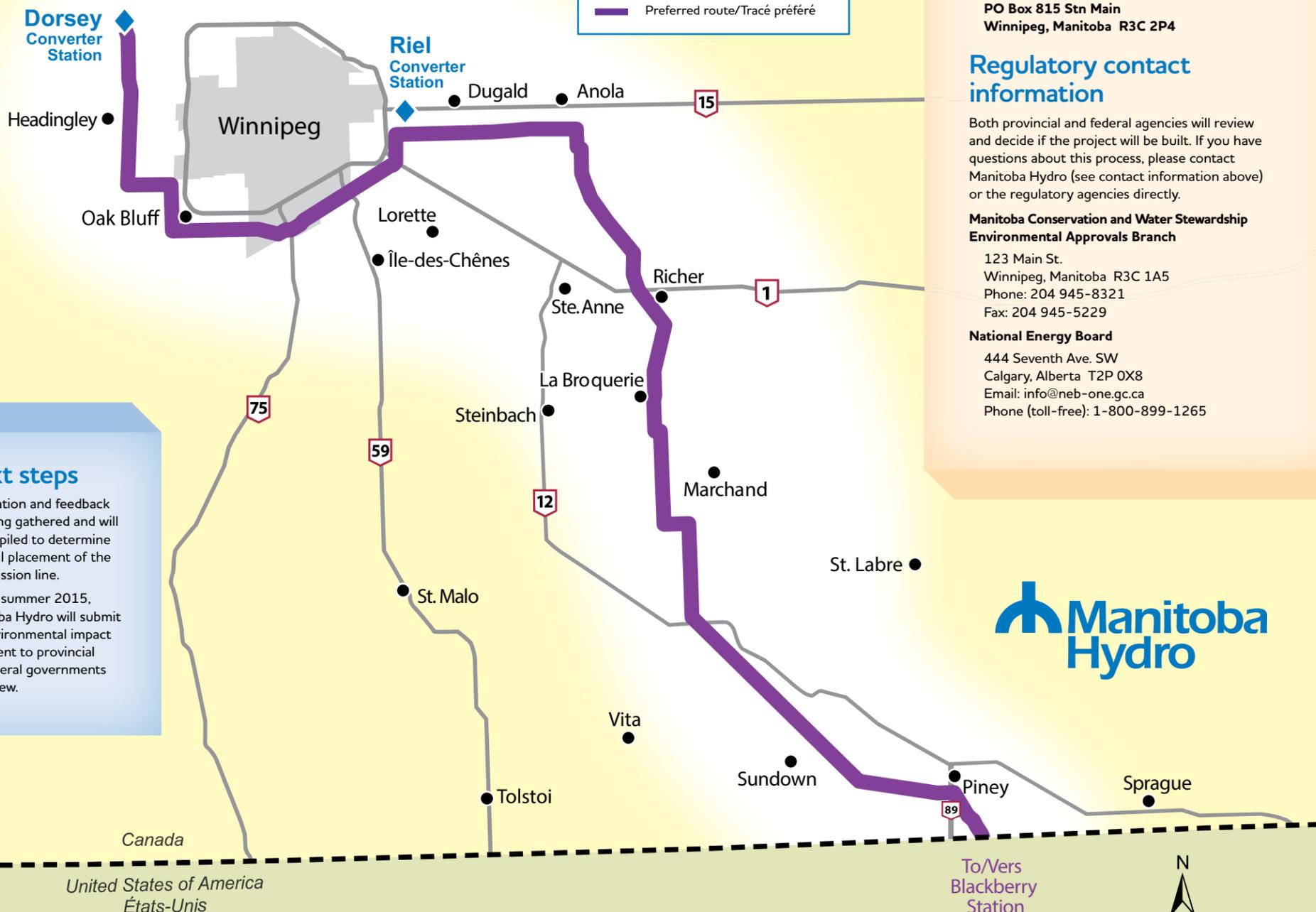
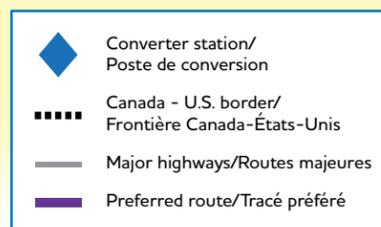
When will it be built?

If approved, Manitoba Hydro plans to start construction in 2017 and finish the work in 2020.

Manitoba Hydro started in 2013 with many route options and border crossings. In 2014, Manitoba Hydro had a preferred border crossing and fewer route options based on feedback received to date. In 2015, Manitoba Hydro will present a preferred route to the public.



Map of Preferred Route



Want more information?

A full range of Manitoba-Minnesota Transmission Project information is available at www.hydro.mb.ca/mmtp. If you want to talk with someone at Manitoba Hydro about the project, please contact us at:

- Phone (toll-free): 1-877-343-1631
- Email: mmtp@hydro.mb.ca
- Mail: Licensing & Environmental Assessment
PO Box 815 Stn Main
Winnipeg, Manitoba R3C 2P4

Regulatory contact information

Both provincial and federal agencies will review and decide if the project will be built. If you have questions about this process, please contact Manitoba Hydro (see contact information above) or the regulatory agencies directly.

Manitoba Conservation and Water Stewardship Environmental Approvals Branch

123 Main St.
Winnipeg, Manitoba R3C 1A5
Phone: 204 945-8321
Fax: 204 945-5229

National Energy Board

444 Seventh Ave. SW
Calgary, Alberta T2P 0X8
Email: info@neb-one.gc.ca
Phone (toll-free): 1-800-899-1265

Next steps

Information and feedback are being gathered and will be compiled to determine the final placement of the transmission line.

During summer 2015, Manitoba Hydro will submit the environmental impact statement to provincial and federal governments for review.



The Safespace website¹ is designed to market and sell various “*EMF Protection Products*” that claim to provide “protection” from effects caused by power frequency electric and magnetic fields (EMF) (i.e., associated with electricity) and from radiofrequency EMF (i.e., associated with cell phones, wireless routers, and other technology). To support their claims, the website provides a biased and very selective “cherry-picked” overview of the scientific literature claiming various health effects related to EMF (mixing both power frequency and radiofrequency).

While some of the studies cited in the website are published in peer-reviewed journals, it is important to consider:

- The studies cited are only a few among the large database of literature on this subject, which seem to have been selectively “cherry-picked” to market Safespace products that purport to shield/treat EMF.
- Many of the adverse health effects alleged to occur due to EMF exposure appear to be based on data taken out of context from a few selected publications and particularly based on two reports by the BioInitiative working group from 2007 and 2012 and one report by the California Department of Health Services (CDHS) published in in 2002.
- The CDHS review was conducted by only three scientists; this small number of reviewers inherently lacks the relevant scientific disciplines needed for an authoritative multidisciplinary review panel. The CDHS reviewers expressed a “degree of certainty” as to whether the increased risks of certain diseases due to exposure to EMF are “real”; however, in addition to their small number, they also departed from the generally accepted weight-of-evidence scientific approach that is commonly used by the World Health Organization (WHO) and other authoritative, multi-disciplinary health and scientific agencies.
- The BioInitiative working group is a self-organized collection of individuals from academic institutions and public interest groups, who did not conduct their reviews under the aegis of any health, scientific, or government agency, and published their reports on the internet. Their reviews were heavily criticized by several authoritative scientific organizations,² for several reasons: the authors did not follow the scientific weight-of-evidence approach; they selectively referenced studies suggesting an association without considering the quality of studies; they summarily discounted studies not showing an effect; they relied heavily on laboratory studies of tissues and cells that play only secondary role in a proper risk assessment; and finally, their reports did not express a consensus opinion, as is customary in risk assessment panels—rather they were compilations of separate opinions by individual authors of various chapters.

It should be noted that the Safespace website fails to discuss the following:

¹ www.safespaceprotection.com/

² Such as the Advisory Group on Non-ionizing Radiation of the Health Protection Agency of Great Britain; the Health Council of the Netherlands; the Australian Centre for Radiofrequency Bioeffects Research; the EMF-NET Steering Committee of the European Commission; and the IEEE’s Committee on Man and Radiation.

- The WHO’s comprehensive review published in 2007 found that the scientific evidence was inadequate to indicate any health risk from EMF for almost all health conditions, but noted there was “limited” evidence from epidemiology studies of an association with childhood leukemia, which is not supported by the results of controlled laboratory research. The WHO concluded that this limited evidence did not provide a scientific basis to find that EMF actually causes or contributes to childhood leukemia, or is likely to do so—they could not rule out the role of chance, bias (i.e., errors in the studies), or confounding by other factors as explanations for this association. Overall, the WHO found there was no reliable scientific basis to conclude that exposure to EMF at levels below the current EMF exposure guidelines would cause any adverse health effects.
- Health Canada found that “the vast majority of scientific research to date does not support a link between ELF [extremely low frequency] magnetic-field exposure and human cancers. At present, the evidence of a possible link between ELF magnetic-field exposure and cancer risk is far from conclusive and more research is needed to clarify this ‘possible’ link”; they do not consider that any precautionary measures are needed to reduced daily exposure to power frequency EMF.
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) is an independent scientific organization formally recognized by the WHO for providing guidance on standards for non-ionizing radiation exposure to protect the public, which in its most recent review in 2010 concluded that their existing guidelines are protective of the well-established acute effects of EMF exposure. These effects are due to direct stimulation of nerves and muscles, induction of visual phosphenes, and surface electric charges that may occur at field levels much higher than those the public may encounter. While ICNIRP recognized the limited epidemiologic evidence from some of the studies of childhood leukemia and EMF, they concluded that “the currently existing scientific evidence that prolonged exposure to low frequency magnetic fields is causally related with an increased risk of childhood leukemia is too weak to form the basis for exposure guidelines.” They also concluded that the evidence for all other diseases are inconclusive or not in support of a potential causal association, and stated that “[i]n general, the initially observed associations between 50–60 Hz [Hertz] magnetic fields and various cancers were not confirmed in studies designed to see whether the initial findings could be replicated.” With respect to potential effects on laboratory animals, ICNIRP concludes that “the animal cancer data, particularly those from large-scale lifetime studies, are almost universally negative.”
- Most recently, the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), an independent scientific committee regularly reviews scientific literature on EMF and health for the Department of Health and Consumer Protection of the European Commission, issued their “Preliminary Opinion on Potential health effects of exposure to electromagnetic fields (EMF)” for public consultation on February 4, 2014. The overall conclusions of SCENIHR are consistent with those of WHO and ICNIRP. They acknowledge the statistical association in some of the epidemiologic literature on childhood leukemia, for which, however, chance, bias, and confounding cannot be ruled out as a potential explanation. Their report reiterates that “no mechanism has been identified that could explain these findings,” which, together with the lack of supportive

laboratory animal data, prevents causal interpretation.

Based on our review of and familiarity with the scientific literature, we make the following conclusions.

- The extensive scientific literature providing research results on potential health effects of power frequency EMF is regularly reviewed by numerous multidisciplinary expert panels on behalf of national and international health, scientific, and government agencies and none of these authoritative agencies concluded that there is any confirmed adverse health effect due to environmental exposures to power frequency EMF.
- The WHO currently states “[b]ased on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields.”³
- The WHO endorses the scientifically-established exposure guidelines developed by ICNIRP as protective of public health. The current ICNIRP magnetic-field exposure guideline for the general public is 2,000 milligauss (mG) [200 µT], including adults and children. The WHO has endorsed this exposure limit as protective of public health, and these exposure guidelines have been adopted in a number of countries, including members of the European Union. The WHO concludes there is no scientific basis to claim health benefits in association with further reduction of power frequency EMF, which are already well below these guidelines. The levels away from and even under the existing and proposed lines on the St. Vital right-of-way will be far, far below the ICNIRP limit.
- The WHO concludes that since the “*benefits of exposure reduction on health are unclear*” the cost of any “*precautionary measures should be very low.*” Thus, the WHO endorses precautionary measures with little or no cost.
- Finally, after review of thousands of peer-reviewed scientific studies, detailed scientific assessments by the WHO, ICNIRP, and other health and scientific agencies have found the research does not provide a reliable scientific basis to conclude that exposure to EMF below the science-based international exposure guidelines can cause or contribute to any adverse health effects. While the presence of an association with EMF has raised the possibility of a risk with high average magnetic-field exposure, this association has not been judged by health authorities as providing a plausible basis to conclude that EMF exposure is actually harmful.

In closing, please understand that Manitoba Hydro’s approach to addressing EMF for its projects is based on both federal and provincial guidance. In its July 11, 2013, approval of an environmental license for the Bipole III transmission line and new 230-kV transmission lines, the Clean Energy Commission of Manitoba cited the conclusions of the WHO and Canadian authorities regarding EMF and health.

³ <http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html>

Manitoba-Minnesota Transmission Project & the Ridgeland Cemetery

Manitoba Hydro received feedback from local landowners, The RM of Stuartburn and discipline specialists regarding Ridgeland cemetery located on North Sundown Road.

The feedback suggested avoiding the cemetery or to maximize separation between the transmission line and the edge of the cemetery, and to respect the practice of *Praznik* that occurs at the cemetery.

As outlined in the photograph below, the preferred route (blue) for the Project has been adjusted north of the refined alternative route (purple) presented to the public in Round 2.



Additional Mitigation

The preferred route (blue line) is currently further from the edge of the cemetery, than the original route presented. Based on feedback from the public engagement process, Manitoba Hydro understands that concerns of the local residents related to proximity, cultural practices and heritage are present. Manitoba Hydro is considering mitigation measures to minimize potential impacts, as follows:

Route location, tower type and placement:

As this area is not agricultural, Manitoba Hydro originally intended to use a different structure with a right-of-way of 100m. After discussions with design staff and consideration of the concerns noted above, self supporting structures will be used in the vicinity to reduce the right-of-way clearing requirement from 100m to 80m. Manitoba Hydro will propose placing towers further away from the cemetery to minimize visibility of the structures at the site. Clearing techniques will also be considered for the area to minimize potential visual impacts (i.e., leaving a larger vegetation buffer between the cemetery and the edge of the right-of-way).

Timing of work (consideration of Praznik):

Manitoba Hydro's understanding of "Praznik" refers to a celebration of a feast day in the life of a church, or parish. The feast day is symbolic for a church where parish members gather once a year as a community to honour the name of their church. Some parishes also use the occasion of the feast day to honour the memories of deceased family members. Usually, the feast day involves blessing water, using it to bless the church and then taking that water to bless the graves in the cemetery.

Manitoba Hydro will attempt to time the work related to clearing, construction, and maintenance of the line and right-of-way to avoid disturbing the practice of Praznik, or other culturally sensitive activities scheduled at the Ridgeland Cemetery.

Heritage Resources and the Environmental Assessment

Manitoba Hydro will be reviewing and assessing potential impacts to heritage resources. The following excerpt from the draft environmental impact statement outlines the importance of assessing cemeteries as part of heritage resources.

"Cemetery locations are included with heritage resources in this assessment because there is the potential for unmarked burials to be present along the perimeter of abandoned and active cemeteries. Community and church graveyards were often developed shortly after homestead settlement and before local government infrastructure were developed and records maintained. Experience in other rural areas across the province has shown that fencing to encapsulate the graveyard often failed to encompass the first burials. The approach of this assessment therefore recognizes the potential for unmarked burials at active/abandoned cemeteries."

A Construction Heritage Resource and Protection Plan will also be developed to address protocol and process for construction teams to address newly discovered heritage resources.

Field Studies Undertaken

After hearing concerns throughout the public engagement process regarding the proximity the route segments to the Ridgeland Cemetery the assessment of this area was incorporated into the field assessment work plan.

The Ridgeland Cemetery was examined by specialists working for Manitoba Hydro in September 2014. GPS data points of the eastern perimeter of the cemetery were recorded to compare the boundary with alternate and preferred routes. The east perimeter of the cemetery is bordered by a dense stand of pine and spruce trees mixed with shrubs. Surveys were conducted by foot along the east edge of the cemetery to determine the potential for any unmarked burials to be present based on observable surface features such as rectangular mounds or depressions. No surface features indicative of unmarked burials were observed. An area 70 m north-south by 50 m east-west on the east side of the cemetery was examined.

The majority of the burials in the Ridgeland Cemetery are near the east perimeter on the west side of the pine and spruce trees. Based on the gravestone styles, the oldest burials are in the northeast corner of the cemetery.

There is a drop in elevation into what appears to be an old cleared right-of-way as one proceeds east of the treed cemetery perimeter. As one proceeds further east, the vegetation changes to a dense canopy dominated by aspen mixed with spruce and pine. It is unlikely that the low-lying area or the dense aspen bush would have been used as a burial ground. Therefore, the entire Ridgeland Cemetery is contained on the sand ridge bounded on the west side by Public Road 402 by the line of coniferous trees on the east, by a hayfield on the south and by a mix of aspen and spruce on the north.



Ridgeland Cemetery looking east from Public Road 402.



Southeast corner of Ridgeland Cemetery looking northwest.



Cleared area on the east side of Ridgeland Cemetery: Spruce/Jack pine border on right of photo; Aspen-dominated mixed deciduous bush on left.

Manitoba-Minnesota Transmission Project

Route Selection Process

January 2015

How do we select a preferred route?

Manitoba Hydro is using a process based on the EPRI-GTC (Electric Power Research Institute-Georgia Transmission Corporation) Overhead Electric Transmission Line Siting Methodology.

This process:

- incorporates routing preferences from internal and external stakeholders that considers built human, natural, and socio-economic perspectives;
- uses these perspectives in the route planning process to help minimize impact on people and the environment.



Has this process been used elsewhere?

Manitoba Hydro first applied this methodology in 2013 on the St. Vital Transmission Complex. It has been used on over 200 transmission projects across North America. The utility is working with Quantum Spatial Inc. (previously PhotoScience Inc.), who have many years of experience in high-voltage transmission line siting and are one of the developers of the methodology.

What are the timelines for route selection?

The timelines of route selection are closely associated with public engagement and environmental assessment activities. Assessment activities are undertaken by discipline specialists including biologists, archaeologists and engineers throughout the route selection process.

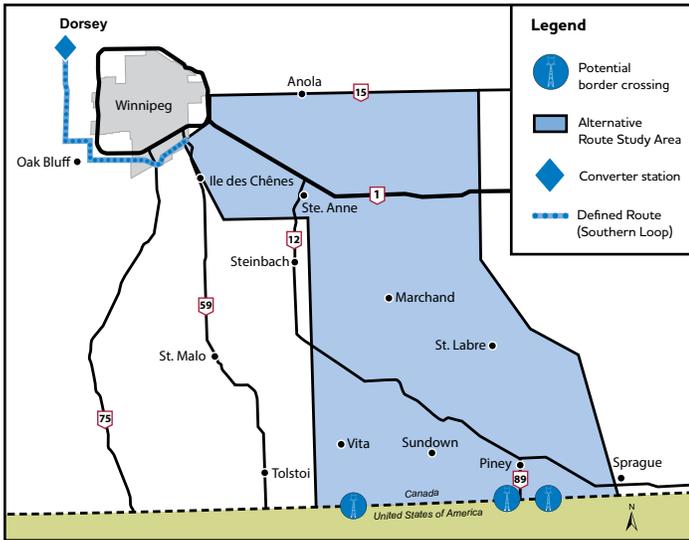
The timeline consists of:

- **Round 1** - fall 2013: alternative routes and three potential border crossing areas;
- **Round 2** - spring 2014: refined alternative routes and a preferred border crossing area;
- **Round 3** - January 2015: preferred route;
- **Environmental impact statement submission** (summer 2015): final preferred route.

What are the steps in the route selection?

Manitoba Hydro undertakes various stages in the route selection process. The following five stages outline how a route study area with multiple possible end points will lead to a final preferred route.

1. Route Study Area and three border crossing areas



- Start and end points are determined and a broad alternate route planning area is defined by considering constraints and opportunities on the landscape.

2. Alternative routes and three border crossing areas

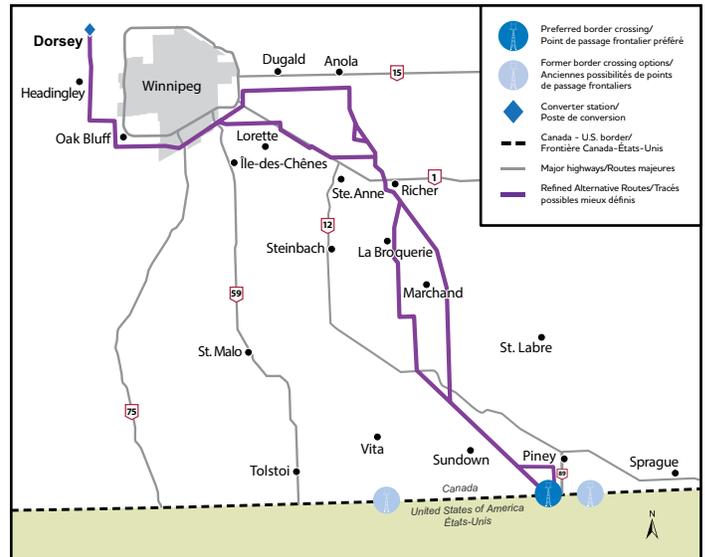
With an understanding of the existing landscape and gathering more detailed opportunities and constraints, alternative routes are developed to the alternative border crossings.



- Discipline specialists evaluate route options.
- Feedback is gathered during Round 1 public engagement.

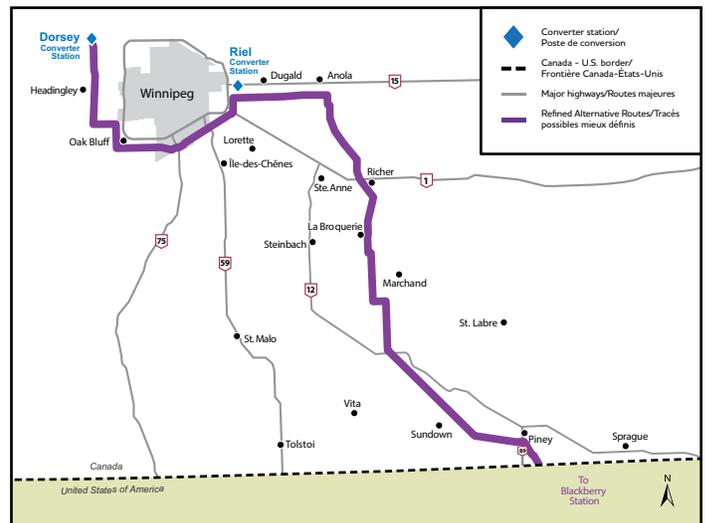
3. Preferred border crossing and refined alternative routes

Based on information from Round 1 and discipline specialists, routes were compared and a preferred border crossing was determined.



- Route segments are removed and others added based on feedback from the public and discipline specialists.
- Discipline specialists focus their evaluations to a more defined area and feedback received is considered.

4. Preferred Route



- Based on information from Round 2 and discipline specialists, routes will be compared and a preferred route determined.
- Discipline specialists are now focused on a specific location for assessment and Round 3 is undertaken to gather information from the public to enhance their assessment.

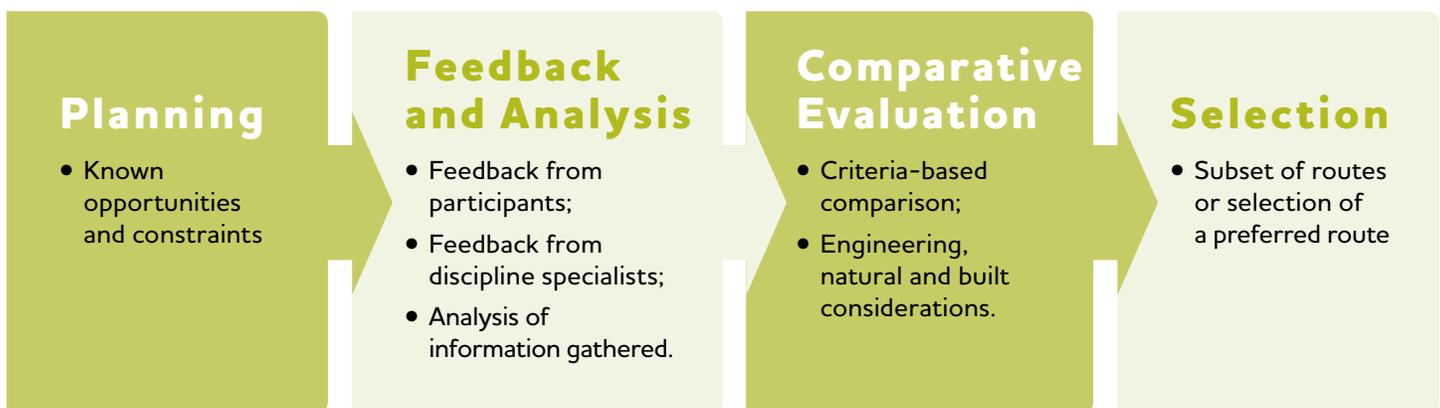
5. Final Preferred Route

- With feedback received from Round 3, proposed modifications to the preferred route will be considered.
- Manitoba Hydro's final preferred route is presented in the EIS submitted to regulatory authorities.
- Documentation of the route selection process and the environmental assessment undertaken on the preferred route will be available for review and comment during the regulatory review process with both Manitoba Conservation and Water Stewardship and the National Energy Board. Public hearings may also take place.

How do we move between each stage?

Manitoba Hydro undertakes planning, collection of feedback, analysis and evaluation throughout each stage of route selection. The diagram below outlines the process in which we make decisions regarding routing. This cycle is repeated

each round until a final preferred route is determined. Total feedback gathered from the public and throughout the environmental assessment process increases as the location and area of analysis narrows.



What criteria are used for the comparative evaluation?

A set of criteria, determined by stakeholder and public feedback as well as discipline specialists, is used to provide a method to compare all routing options. Criteria based on natural, built and engineering perspectives are used to review the options and see where strengths and weaknesses exist. Examples of the criteria include:

- Natural: acres of natural forest, acres of wetland area, stream and river crossings;
- Engineering: project cost, existing transmission line crossings, length;
- Built: proximity to residences, land use & capability, historic resources, public use areas.

Further comparison is undertaken prior to determining a subset of routes or a preferred route. Comparative values include:

- cost;
- reliability;
- community considerations;
- risk to schedule;
- built environment and the natural environment.

How is public input incorporated into the route selection process?

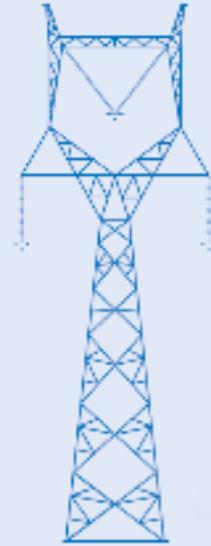
Public input is collected and considered throughout the route selection process.

- Site specific issues are documented, route alterations are brought forward to the project team, concerns and preferences are compiled and general transmission line routing feedback is considered in the decision making process.
- Information collected from the public is provided to discipline specialists to enhance their assessments of the preferred route.
- Local feedback and knowledge will assist in final design and placement, such as route modifications and tower placement.
- Information and knowledge collected assists in determining mitigation measures to minimize potential impacts to people and the environment.

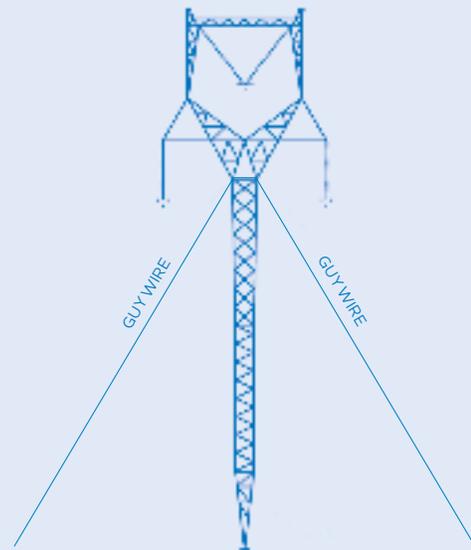
Where can I get more information on the route selection process?

- Visit www.hydro.mb.ca/mmtp for a detailed outline of the stages of the EPRI-GTC methodology.
- Speak with a Manitoba Hydro representative by phoning the Manitoba-Minnesota Transmission Project information line at **1-877-343-1631** (toll-free) or emailing mmtp@hydro.mb.ca.

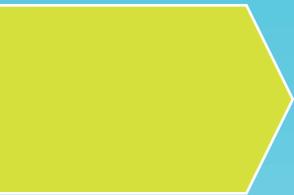
Preliminary tower design



500-kV Self-Supporting Lattice Steel Tower



500-kV Guyed Suspension Steel Tower
(Towers are not drawn to scale — conceptual only.)



Seven things you should
know about Manitoba's
energy future.

POPULATION GROWTH =

Manitoba's population in 2012 was 1,267,000. In 2032 it will be 1,568,500, an annual increase of

1.1%



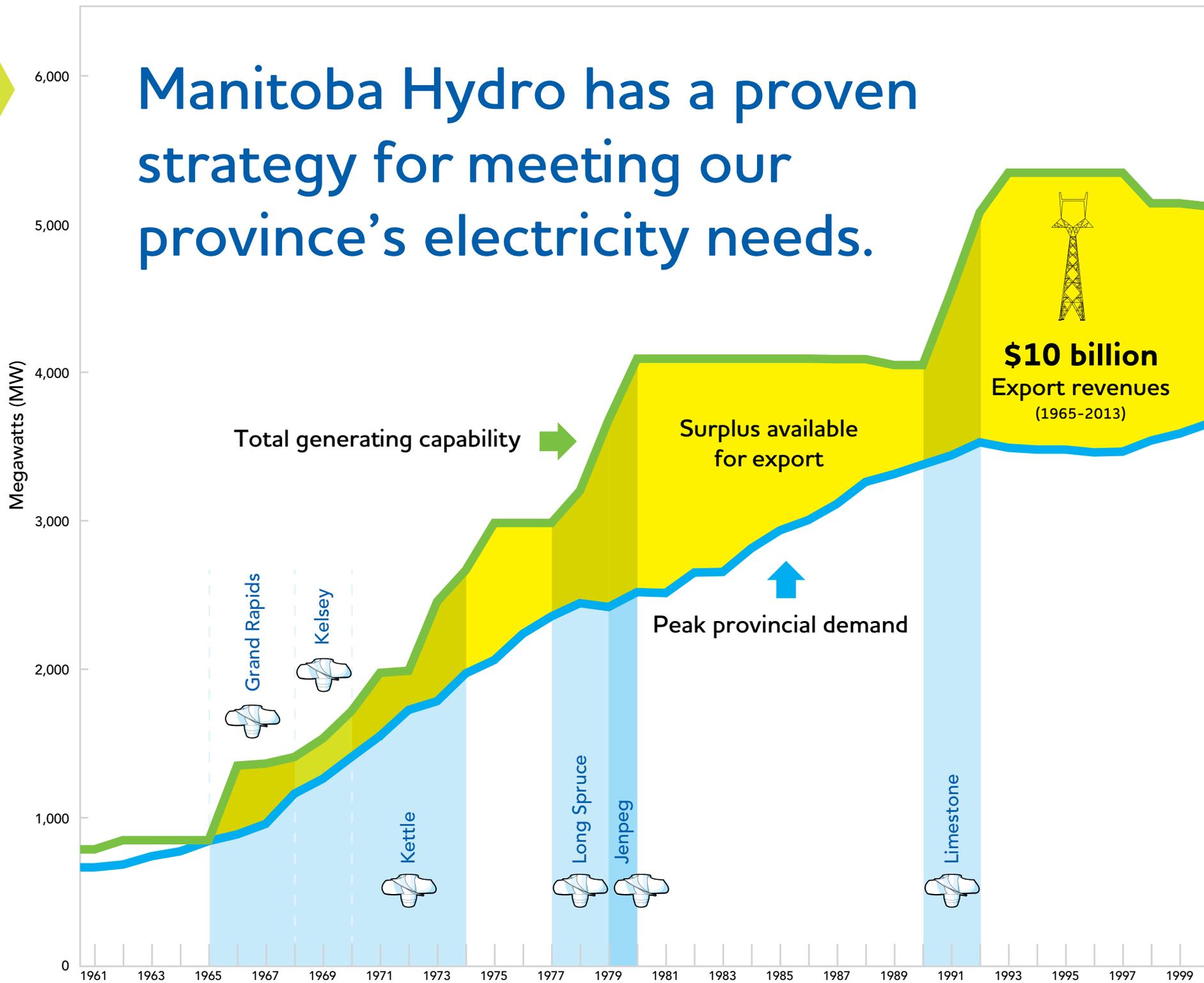
NEED FOR NEW ENERGY

SHORTFALL

of dependable energy by 2023



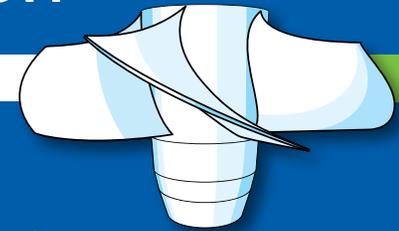
Manitoba Hydro has a proven strategy for meeting our province's electricity needs.



Our development plan

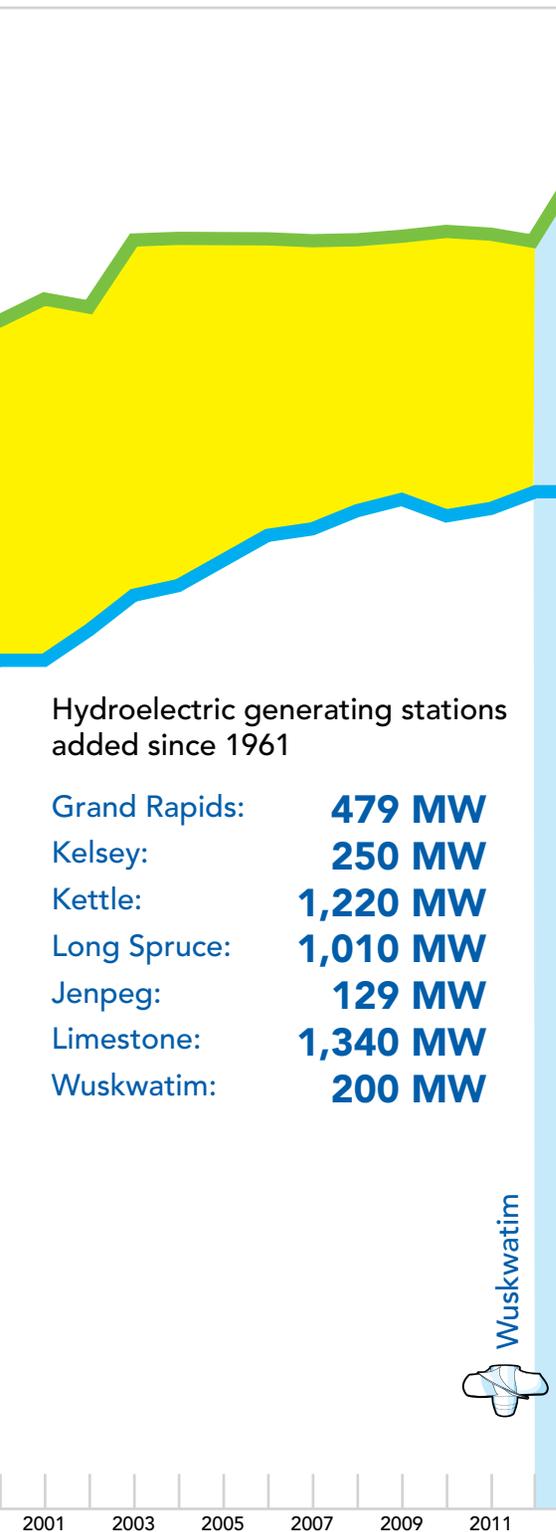
Manitoba Hydro's plan continues a proven strategy of developing this province's clean, renewable hydro resources and building transmission interconnections to take advantage of associated export sale opportunities and enhance reliability. It includes:

The 695-megawatt Keeyask Generating Station



The 1,485-megawatt Conawapa Generating Station

The 750-megawatt Manitoba-Minnesota Transmission Line



Hydroelectric generating stations added since 1961

Grand Rapids:	479 MW
Kelsey:	250 MW
Kettle:	1,220 MW
Long Spruce:	1,010 MW
Jenpeg:	129 MW
Limestone:	1,340 MW
Wuskwatim:	200 MW



2001 2003 2005 2007 2009 2011

3

Hydroelectric development is the best option for Manitoba.

Continued development of Manitoba's renewable hydroelectric resources is the best alternative for fulfilling the future energy needs of our province because:

- It provides the lowest **electricity rates** for Manitobans over the long-term.
- It provides the highest level of **system reliability** (ability to deal with emergency outages) and **energy security** (ability to deal with severe droughts or unexpectedly high energy consumption).
- It has the most **overall flexibility** to deal with future uncertainties and take advantage of additional export opportunities.
- It supports Manitoba Hydro's long-term **financial health** with higher levels of fixed assets and retained earnings.
- It has the lowest levels of **greenhouse gas** emissions.
- It provides the most jobs and greatest **socio-economic benefits**.
- It provides opportunities for **Aboriginal communities** in the vicinity of the new generating stations.
- It provides the largest payments to the **provincial government** through taxes and fees.

Manitoba Hydro's development plan produces the greatest benefit compared to an all gas plan.

Millions of dollars (2014 values)

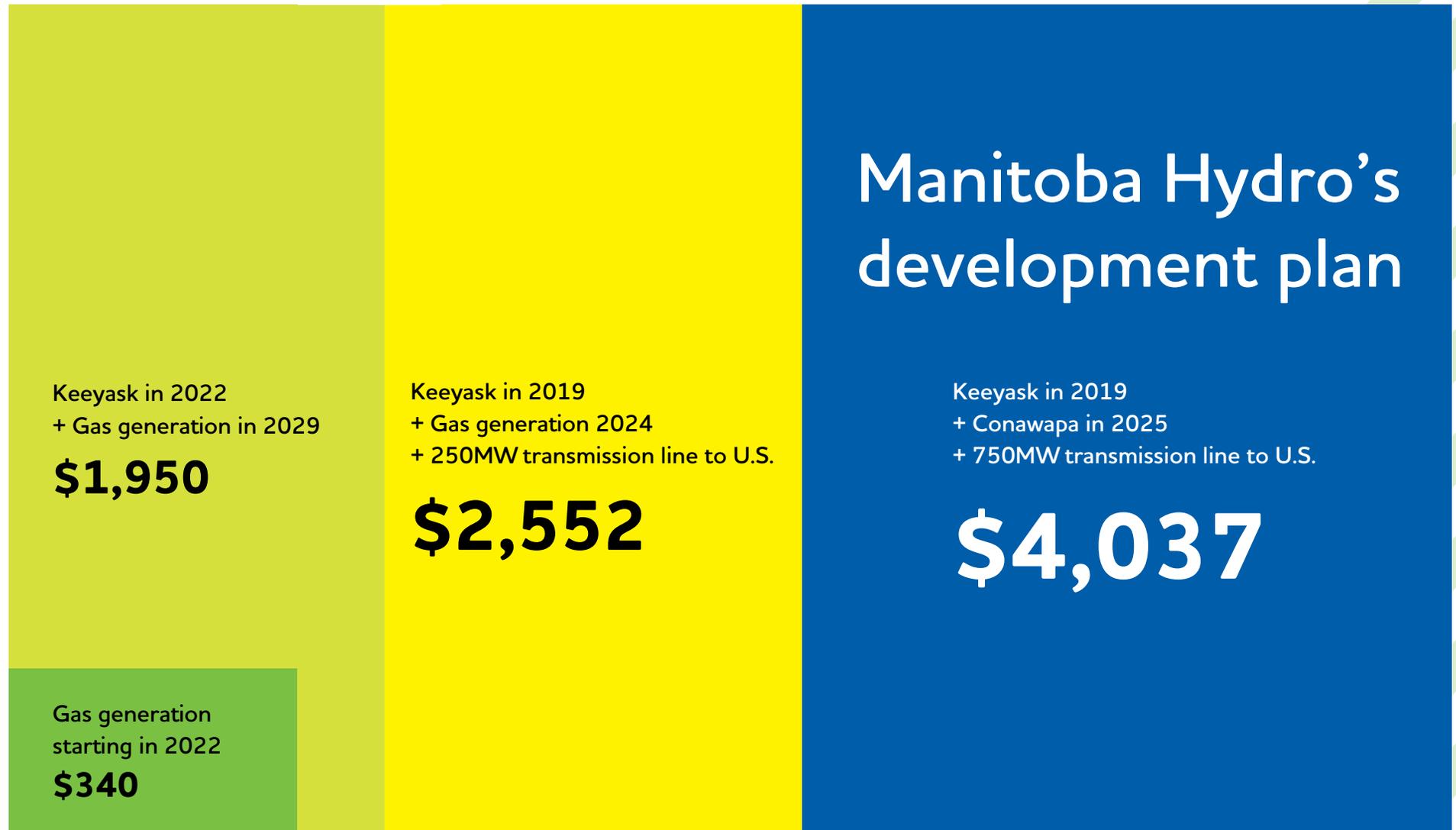


Illustration compares net present value of each plan – including benefits to Manitoba Hydro and taxes and fees to the Province – relative to the investment for an all natural gas-fired generation development plan. Net present value is the difference between the present value of a project's revenue and the present value of its cost.

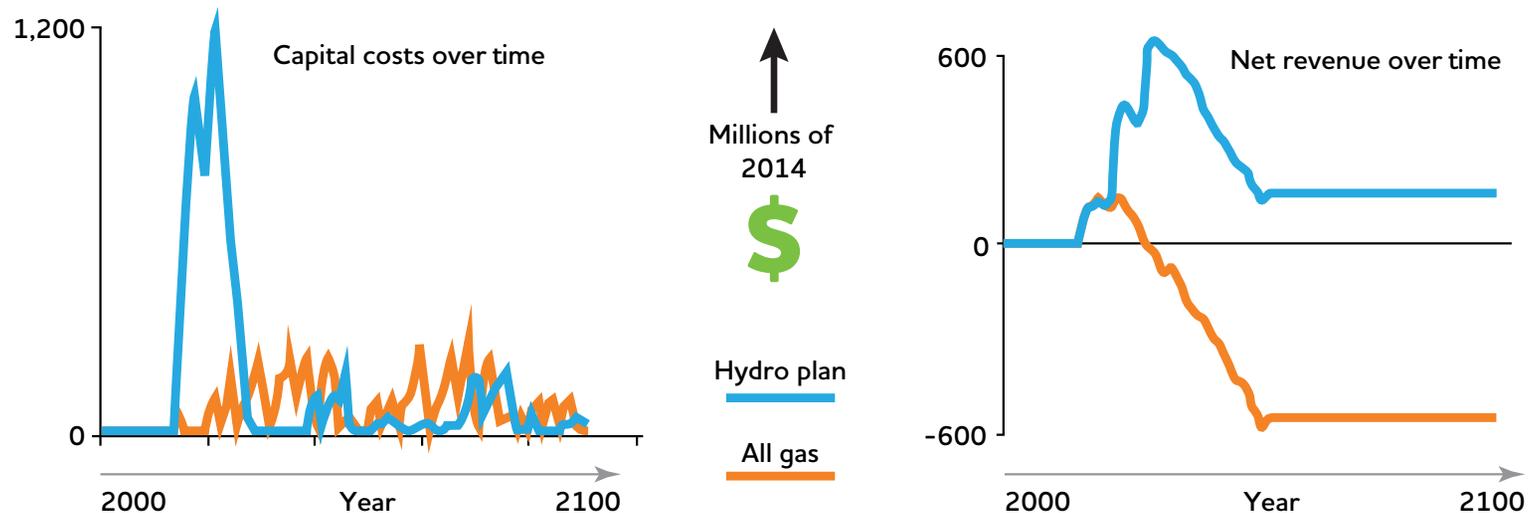
4

Building natural gas-fuelled generation will mean higher costs for Manitobans.

Of the alternatives considered, building natural gas generation has the highest net costs for Manitoba Hydro and, therefore, the highest long-term electricity rates for Manitobans.

Natural gas generating stations have lower upfront construction costs compared to hydroelectric generating stations, but they also have a significant fuel cost and a shorter service life. Hydroelectric generating stations have virtually no fuel costs and can operate for 100 years or more, providing an infrastructure legacy for future generations.

Building natural gas generation is also less attractive because it foregoes the current opportunity to develop a new transmission interconnection and its associated import and export benefits.



5

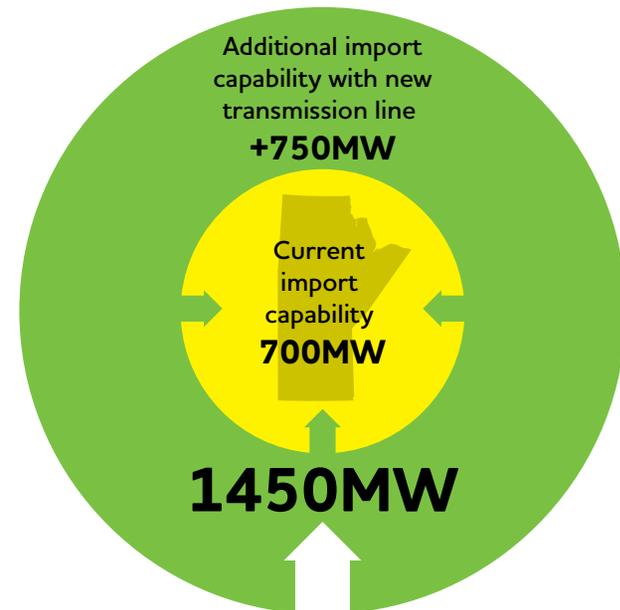
A new transmission line to the U.S. is key to Manitoba's energy future.

A new interconnection will enhance access to the U.S. market, providing additional opportunities to earn revenue from surplus power. Without export sales, customers in Manitoba would all pay more for their electricity.

A new interconnection will also provide increased reliability for Manitoba's energy supply, allowing the import of additional electricity during emergency outages as well as access to alternative supplies in the event of an extreme drought or higher than forecast load growth.



Source of electricity revenue, 2003-2012

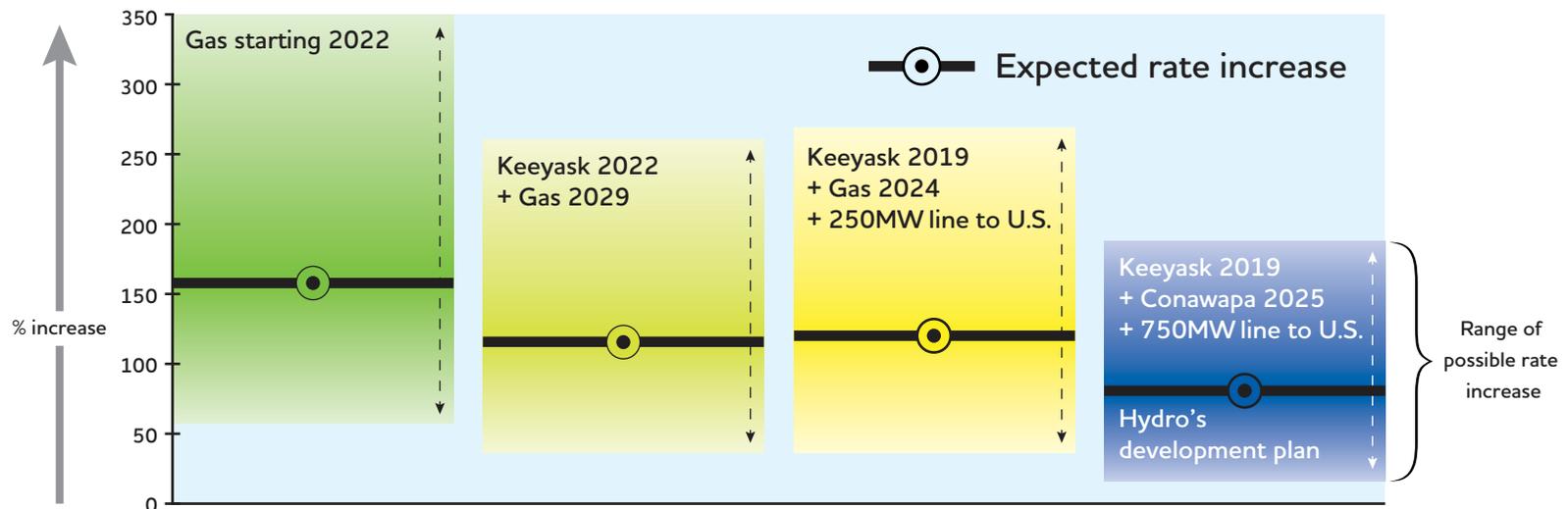


6

Manitoba Hydro's plan results in the lowest electricity rates over the long term.

Electricity customers in Manitoba currently enjoy rates that are among the lowest in North America. However, Manitoba Hydro cannot meet growing demand for electricity at these same rates. Rate increases are needed to provide new supply. Manitoba Hydro's development plan has the lowest projected rate increases of any alternative and pursuing this plan will allow the province to maintain its competitive position relative to the rates charged by electric utilities in other parts of Canada.

Probable range of projected cumulative rate increases over 50 years



Over the long term the expected rate impact of Manitoba Hydro's development plan is lower and has more certainty than the alternatives.

7

Manitoba Hydro's plan will be reviewed by independent agencies.

Manitoba Hydro's development plan is the subject of a Needs For and Alternatives To (NFAT) review by the Public Utilities Board aided by a number of independent consultants from across North America.

In addition, the major projects that make up the plan – Keeyask, Conawapa and the Manitoba-Minnesota Transmission Project – will also be subject to public reviews as part of the environmental licensing process. A public review of the Keeyask Project's environmental impact statement by the Clean Environment Commission concluded in January.



For more information on
Manitoba Hydro's development plan
visit www.hydro.mb.ca/development



Milking parlour in a barn with an equipotential plane that has eliminated stray voltage problems

Stray voltage, also referred to as tingle voltage, refers to a small voltage difference between two animal contact points. A common example is the small voltage difference between the water bowl and the floor of a dairy barn – points that an animal can touch simultaneously.

If the stray voltage is large enough, it can cause a current to flow through cows, creating a tingling sensation that can disturb your herd. The animals may not want to come in for milking, be nervous during milking, eat less or produce less milk.

When stray voltage occurs, the sources can usually be found and corrected following a thorough investigation by your electrical contractor.

This data sheet presents instructions on measuring stray voltages and taking reference voltage measurements to find the sources of stray voltage. The stray voltage checklist can reveal potential on-farm problems with electrical equipment or wiring, which a qualified electrician can repair or replace to reduce stray voltage levels on your farm. Basic solutions and details on installing an equipotential plane, whether in new construction or as a retrofit are also offered.

Effects of stray voltage on production, health and behaviour

Cows are many times more sensitive to voltages than humans. Furthermore their sensitivity varies with the area of contact: the same voltage between nose and hoof, for example, elicits a larger behavioural response than an identical voltage between hoof and hoof.

Symptoms of a stray voltage problem typically take the form of reduced milk quality, lower milk production, weakening of the immune system and behavioural indicators such as a reluctance to use certain parts of the barn.

In tackling a perceived stray voltage problem it is vital that any other factors contributing to the problem be addressed and corrected accordingly. Only then will the producer be able to identify a problem caused by stray voltage.

Here is an overview of the symptoms of stray voltage, according to the province's dairy specialist:

Milk quality symptoms

An indicator of a stray voltage problem is an elevated somatic cell count (SCC) that cannot be attributed to either poor milking practices or environmental conditions. This results from retained residual milk that provides a greater "foothold" for invading mastitis-causing microorganisms. (Mastitis is an inflammation of the mammary gland.)

If the cow's immune status is compromised, then the udder is less able to effectively fight off a mastitis infection, leading to a sharp rise in SCC.

Stray voltages that affect the initial milk letdown time will lead to teat ends being exposed to higher vacuum levels with no milk flow. This leads to damaged teat ends, which do not provide an effective barrier to invading bacteria. Consequently, the cow is at a much higher risk of developing a mastitis infection.

As mentioned earlier, however, a "symptom" such as an elevated SCC may be attributed to a variety of other factors.

Production symptoms

If the stray voltage is primarily occurring during milking, the milk letdown response may be attenuated or reduced in force. The oxytocin release will be lower, which means that more residual milk may be retained in the udder. Such incomplete "milkout" across the herd represents considerable loss of production.



Fans in the rear wall of this barn are wired for 240-volt operation, for a lower neutral-to-earth voltage. In this barn, which uses an equipotential plane to eliminate stray voltage, producers have installed 15-20 foot candles of lighting, well over traditional barn lighting levels of 5 foot candles, since studies show that more light can increase milk production up to 16% .

Stray voltage can also alter feed and water intakes. If cows are reluctant to feed and drink, then milk yield will decrease as the rumen (first stomach) does not maintain a stable environment and the cows' energy intake is not maintained. If feed intake is reduced enough to affect body condition, the cows will almost certainly be more difficult to get back in calf (rebreed).

Health symptoms

Research has shown that persistent intermittent shock equivalent to that of stray voltage produces a stress hormone response in cattle. This is characterized by an increase in blood cortisol and epinephrine. Both these hormones put the cow in a catabolic state, which means she will break down body fat reserves. The efficiency of the liver to process metabolites will also be affected.

Cortisol is also known to weaken the animal's immune response by reducing the numbers of peripheral white blood cells, which are directly responsible for defending against microbial attack in the udder and gastrointestinal tract.

Behavioural symptoms

Common behavioural indicators for cows are nervousness or reluctance to use certain parts of the barn. Cows may be extremely hesitant to enter a milking parlour and often defecate immediately on entry.

Stray voltage problems during milking will also cause restlessness in cows, shown by foot raising, swaying, tail swishing and an increased likelihood of the animals kicking off their milking units. Cows will rapidly exit the parlour following milking, increasing the risk of slipping and injuring themselves.

Problems elsewhere in the barn may alter feeding and drinking behavior. One commonly observed problem is cows lapping or splashing water, if a stray voltage potential is present at the drinker.

Stray Voltage versus Neutral-to-Earth Voltage

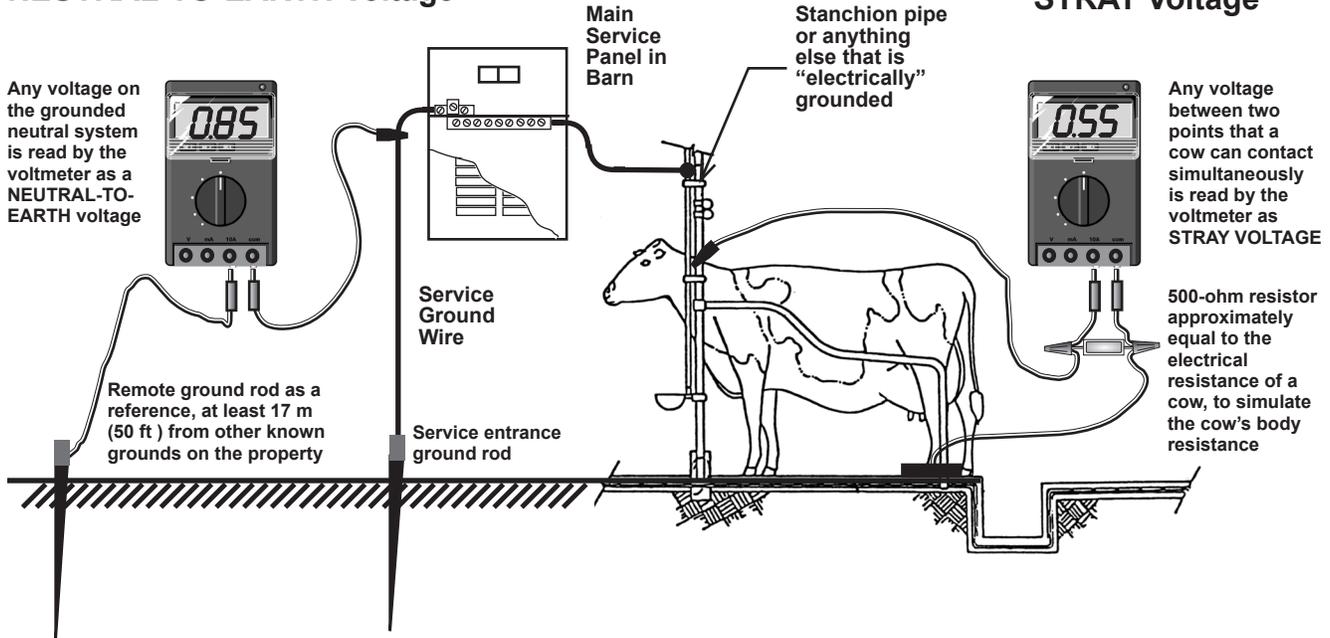
Neutral-to-earth voltage (NEV) is a voltage between a neutral conductor or other metal objects when measured to an electrically remote ground reference point. It is typically higher than stray voltage.

NEV is a useful diagnostic measurement, but it doesn't necessarily have an impact on the animals.

Stray voltage (SV) is a specific occurrence of NEV where a voltage difference exists at any two points an animal can reasonably be expected to touch simultaneously. You can have significant NEV and insignificant SV, but not the other way around, unless there is a fault in the internal electrical wiring somewhere.

NEUTRAL-TO-EARTH Voltage

STRAY Voltage



Causes of stray voltage

The causes of stray voltage are often very difficult to locate. They may originate on the farm, off the farm or both.

A source of on-farm stray voltage is the small AC voltage associated with poor wiring in the farm's electrical system. The small AC voltage is referred to as the neutral-to-earth voltage (NEV). NEV is a normal and unavoidable consequence of operating electrical farm equipment. It is the result of current flowing through the resistance of the grounded neutral conductors and connections. NEV is measured between the electrical system neutral and an electrically remote ground reference point or earth.

Anything that offers a conductive path between a voltage on the electrical system neutral and true earth will conduct an electrical current.

For example, a cow standing on the floor of a barn has its hoofs in good contact with true ground or earth through the concrete, which is often highly conductive because it is saturated with manure. When the cow drinks from water bowls, which are grounded through the metallic plumbing system, the animal makes an electrical connection between the neutral conductor and true earth. If the ground potentials are different, current will flow through the cow. The current can create a tingling sensation if the voltage is high enough.

STRAY VOLTAGE LEVELS

Measured between two points that a cow can contact simultaneously

Voltage	Effect on Cows	Action
more than 2.0 volts AC RMS 60 Hz steady state*	Stray voltage may cause problems	Utility and customer mitigation strategy
1.0-2.0 volts AC RMS 60 Hz steady state	Stray voltage may be a problem	Customer mitigation on a case-by-case basis (optional, at discretion of customer)
less than 1.0 volt AC RMS 60 Hz steady state	Stray voltage is unlikely to be a problem	Customer mitigation (optional, at discretion of customer)

*Steady state means that the voltage must last longer than 1 minute.

One reason the situation is so critical on dairy farms is that cows have a much lower resistance to current than humans. The resistance of a cow typically ranges from 300 to 900 ohms, while the resistance of a person ranges from 3000 to 9000 ohms.

The difference is mainly because cows are much heavier and have four hooves in good contact with the earth. Compare their situation to a man with dry socks, rubber boots and cal-

loused hands. Under these conditions the man may not even detect a current flow, while the cow may experience noticeable discomfort.

Other on-farm sources of stray voltage are: electrical short circuits in equipment; defective underground cable; unbalanced 120-volt loads that cause an increased voltage on neutral conductors; corroded neutral conductor connections; missing or inadequate equipment grounding systems; and corroded or missing bonding connections (such as floors not electrically connected to pipelines); stanchions; and metal water bowls.

The normal operation of electrical equipment (such as welders, motors, pumps and conveyors) in remote areas of the barn or other buildings may also result in stray voltage within animal confinement areas.

Unusual intermittent sources of stray voltage have been traced to a bare section of energized copper wire that the wind occasionally blew against the metal wall of a barn; a spider web that, when wet, made a connection between the lead-out wire of an electric fence and a nearby stanchion; and the grounding system on a telephone that caused a problem every time the phone rang.

How much a source contributes to stray voltage levels depends on many factors, including the layout of the farm electrical system.

Soil moisture levels affect both stray voltage and the resistance of the electrical path through the cow's body to earth. As a result, problems and symptoms tend to vary greatly with the weather and seasonal conditions.

The variability of factors that affect stray voltage, as well as the reaction of the cow to these voltages, explains the intermittent "here today, gone tomorrow" nature of the problem.

A visual inspection checklist of potential on-farm problems that could cause stray voltage is included later in this data sheet. Correction of on-farm deficiencies requires the services of a qualified electrician.

Off-farm voltage sources may also be present on your farm. If required, Manitoba Hydro will conduct an investigation using controlled, standardized test procedures to determine to what extent electrical distribution facilities or other off-farm sources contribute to stray voltage levels. If an abnormal contribution is found, Manitoba Hydro will take action to help reduce the level of stray voltage on your farm.

Strategy for determining sources of stray voltage

Whether your electrician sets up to measure stray voltage or to take neutral-to-earth voltage readings (as described in the following sections), both set-ups can be used to determine sources of stray voltage.

The strategy is to switch various electrical loads "on" and then "off" to see if stray voltage is present when the loads are on.

In addition, if your electrician has two properly connected voltmeters, stray voltage and neutral-to-earth voltage can be measured at the same time to streamline your search for sources of stray voltage.

Measuring stray voltage

Ask your electrician to determine if there is stray voltage on your farm by using a voltmeter to measure the voltage between two points that may be simultaneously contacted by livestock.

Stray voltage is usually measured between points such as drinking cups, water pipes, stanchions and the floor.

Voltage measurements should be taken whenever livestock exhibit symptoms that reportedly have been attributed to stray voltage.

Voltmeters

A good quality, true RMS digital voltmeter, with excellent contact at both lead ends, can be used to measure stray voltage. By reading the RMS value of the voltage, the voltmeter gives an "average" rather than peak value for an accurate measure of stray AC voltage.

Stray voltage readings should be steady state values that last longer than a minute, not transient voltages. Transients, caused by equipment startups for example, typically do not contribute to stray voltage problems. In cases where they are suspected of causing a problem, their magnitude, duration and frequency should be evaluated.

The voltmeter should have a high input impedance of 5000 ohms or more. It should be able to differentiate between AC and DC.

A meter with a full-scale reading of 2.5 volts AC RMS 60 Hz steady state is ideal. A full-scale reading of 5.0 volts AC is normally acceptable.

Voltage recorders are valuable for monitoring voltage levels over time, helping to identify the "here today, gone tomorrow" nature of stray voltage problems.

Taking accurate stray voltage measurements

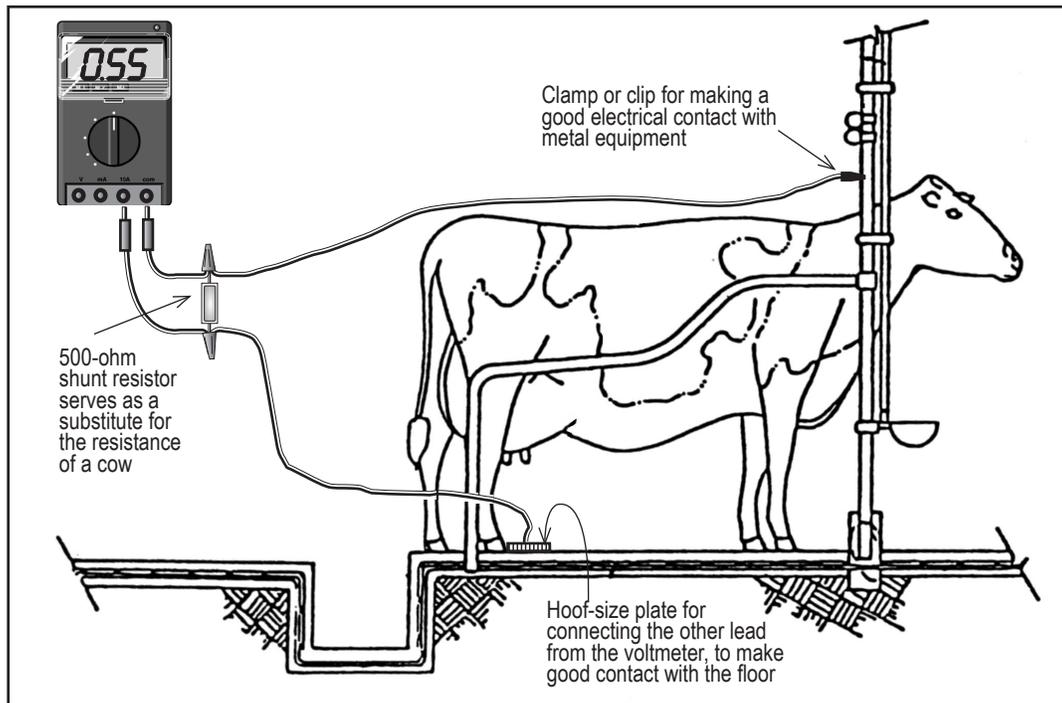
To accurately measure the stray voltages that your livestock may feel, the voltmeter must "look" like a cow (electrically). The electrician can do that by connecting a 500-ohm shunt resistor across the voltmeter leads.

The 500-ohm shunt resistor is approximately equal to the resistance of a cow. It will also bleed off or "drain" weak voltage sources, such as static, that do not contribute to stray voltage. A two-watt, flameproof resistor of about 500 ohms, available at most electronics parts stores, is recommended as the shunt resistor.

NOTE: The shunt resistor should be removed from the meter before using the meter to make any measurements other than stray voltage measurements.

Taking stray voltage measurements

Point-to-point measurements simply mean taking voltage measurements between two points that may simultaneously be touched by livestock. Typical pathways include body to hooves, mouth to hooves, and mouth to body.



Typical voltmeter connections for measuring stray voltage between animal contact points, such as stanchions, water troughs, and feeders, and the concrete floor. The 500-ohm shunt resistor across the leads of the voltmeter is approximately equal to the resistance of a cow, to simulate the resistance of the cow's body for an accurate measurement of stray voltage.

The meter probe that is in contact with the floor must be in a wet location with good contact pressure to ensure electrical contact.

The recommended method is to attach the lead to a hoof-area-size copper plate 100 to 230 sq.cm (16 to 36 square inches), placed on the wet concrete floor.

A water/salt mixture can be used to improve the electrical contact of the plate with the floor. Other alternatives, such as standing on the voltmeter probe or clamp, or attaching the clamp to wet metal contact points may work satisfactorily in many cases.

When measurements are taken, the clamp on the end of the voltmeter lead should be twisted or scraped when attaching it, to make sure there is good electrical contact.

Two copper plates can be used to measure "step" voltages – the voltage between an animal's front and rear hooves as it steps onto an equipotential plane.

Voltmeter leads

Most voltmeter leads are too short to make point-to-point voltage measurements. You may want to use two No. 18 wires to extend the length of the voltmeter leads when making measurements to the various metal contact points.

To determine the effect of bonding, you can use light duty car battery jumper cables as temporary bonding jumpers.

Taking voltage readings

Normally, stray voltage should be measured during milking, when the highest electrical loads are present and any substantial stray voltage levels may occur.

Voltage measurements should be taken at several animal contact locations to determine where the voltage is greatest. Use **TABLE 1: Stray Voltage Measurements**, at the end of this data sheet as a guide for recording voltage measurements.

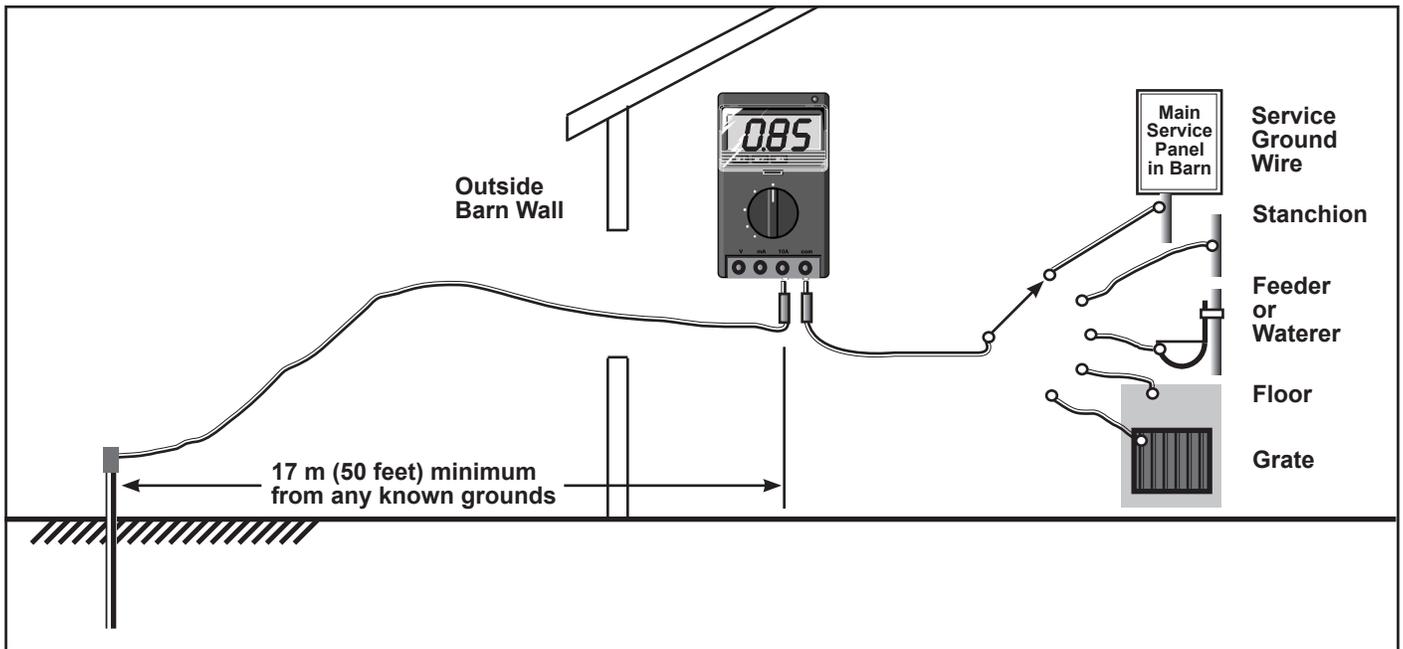
The date and time that measurements are taken should be included. This information may serve as a future reference to detect any changes in your farm electrical system.

If stray voltages exceed 2.0 volts AC

If your electrician measures stray voltage above 2.0 volts AC RMS 60 Hz steady state, or you are concerned that you have a stray voltage problem, the next step would be to turn off and on the electrical loads in your barn to determine the source of stray voltage as measured. If this does not reduce or eliminate the stray voltage, ask your electrician to take neutral-to-earth voltage measurements without the 500 ohm resistor, as described in the following section. The electrician should also make a visual inspection of your electrical systems, using **TABLE 3: Stray Voltage Checklist**, at the end of this data sheet.

The visual inspection and the diagnostic voltage measurements may indicate repairs or replacement of electrical equipment or wiring is required by a qualified electrician to reduce or eliminate stray voltage.

Your electrician should also consult the material on basic solutions, installing an equipotential plane, and other options for further details on reducing stray voltage.



Measuring neutral-to-earth voltages in the milkhouse and barn area to help diagnose sources of stray voltage. The 500-ohm shunt resistor is not used when taking these measurements

Taking neutral-to-earth voltage readings

If stray voltage measured as described in the previous section exceeds 2.0 volts AC RMS 60 Hz steady state, and if stray voltage cannot be accurately measured or isolated by switching barn electrical loads on and off, your electrician could take neutral-to-earth voltage readings in the barn area. The readings would determine if the source of the electrical problem was somewhere else on the farm (for example, the house, other buildings, or other utilities such as the telephone) or from an off-farm source.

As mentioned earlier, when taking neutral-to-earth voltage readings, various electrical loads on the farm can also be switched off/on or isolated, then switched on, to determine the source of the stray voltage problem.

Stray voltage measurements can also be taken at the same time as neutral-to-earth voltage measurements, if your electrician has two properly connected voltmeters.

Neutral-to-earth voltages are measured between a reference ground and various pieces of metal equipment and the floor to help diagnose sources of stray voltage. Use **TABLE 2: Neutral-to-Earth Voltage Readings**, at the end of this data sheet, for recording voltage readings.

Metal equipment includes: stanchions, feeders, waterers and grates. The reference ground is usually a metal stake or rod driven into the soil at least 17 metres (50 feet) from any known electrical grounds, water pipes or grounded metal equipment. An insulated wire (No. 18 is adequate) is used to connect the probe from one terminal of the voltmeter to the reference ground stake or rod. The other probe is used to contact metal objects and floors within the animal confinement area. For future readings, use a ground rod driven at the same location for consistency.

Measuring voltages between a reference ground and other points usually results in higher voltage readings than voltages read between points that an animal can touch simultaneously at various times of the day.

The voltages read are not a measurement of stray voltage that can harm animals, because an animal cannot simultaneously contact points that are so far apart. But they may indicate whether the source of stray voltage is on- or off-farm.

When you measure voltages on outside equipment, such as feeders or stock waterers, use a metal rod driven 30 to 45 centimetres (12 to 18 inches) into the ground approximately 10 metres (30 feet) from the equipment being measured.

Neutral-to-Earth voltages higher than 5.0 Volt AC

If your diagnostic voltages exceed 5.0 volt AC RMS 60 Hz steady state, call Manitoba Hydro to request assistance in conducting further voltage measurements. Have your voltage measurements available in **TABLE 2: Neutral-to-Earth Voltage Readings**, which appears at the end of this data sheet.

WARNING

Never remove or cut the ground at the transformer service pole or anywhere else in the system when taking these or any other voltage measurements. Damage to equipment, severe shock or electrocution may result.

Solutions

Basic measures

Here is a summary of checks that your electrician should perform at a dairy operation where stray voltage is suspected.

1. **Check for faulty equipment, loose or corroded wiring, and failed electrical insulation.** High humidity, silage acids, urine and manure make dairy farms a corrosive environment for electrical wiring and equipment. Regular maintenance of the electrical equipment is important.
2. **Check that service entrance grounding meets the requirements of the Manitoba Electrical Code.** Recent studies show that ground rods in service for 10 years or more may become less effective because of erosion by galvanic action or because of dry soil conditions.
3. **Balance all 120-volt loads.** For single-phase service, motors and heating equipment for new installations should be wired for 240-volt operation rather than 120 volts. This reduces the voltage drop across the neutral.
4. **Provide adequate power circuits for all equipment.**
5. **Interconnect and bond all metallic structures and electrical equipment.** Take special care for structures that animals touch. Isolated metal parts not in contact with electrical equipment, such as metal water bowls supplied by polyethylene water lines, need not be bonded.

Equipotential planes

An equipotential plane is an area where wire mesh (or other conductive elements) are embedded in a concrete floor or platform and bonded to all nearby conductive equipment, structures or surfaces. This area is connected to the electrical grounding system to prevent a difference in voltage from developing within the plane.

Livestock that make contact between the concrete floor or platform and the equipment or metal structures will be less likely to be exposed to a level of voltage that may alter animal behaviour, health or productivity.

An equipotential plane is highly recommended for all new milking parlours. Proper consultation before construction should result in an equipotential plane being included in

the farm building plan. Owners should seek assistance from their general contractor, a licensed electrical contractor, and Manitoba Hydro. The plane should be inspected by one of Manitoba Hydro's electrical inspectors before the concrete floor is poured.

New installations

Mesh size – Wire mesh 15 centimetres by 15 centimetres (6 inches by 6 inches), commonly used for reinforcing concrete, will provide a satisfactory conductive gridwork in the concrete floor of the milking parlour and tie stall area. The wire mesh can range in size from No. 6 to No. 10 AWG.

Bare copper wire not smaller than No. 8 AWG, or reinforcing steel not smaller than No. 3 gauge, placed in a grid pattern may also be used.

Grid spacing should not exceed 45 centimetres by 45 centimetres (18 inches by 18 inches) in freestall areas.

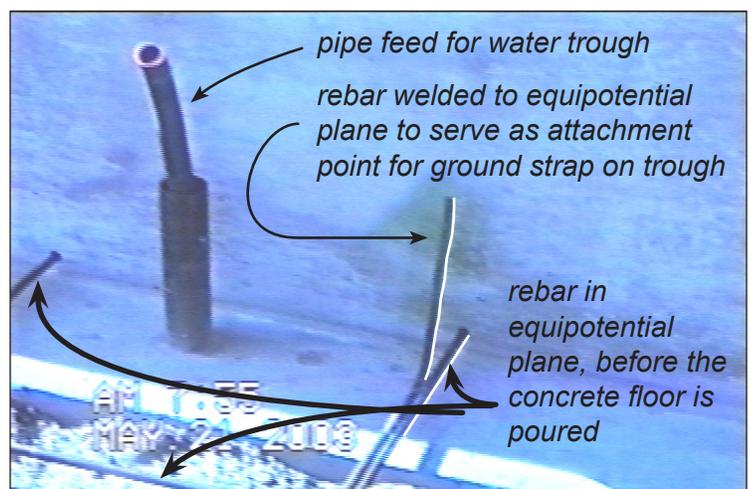
Where wire mesh is used, a grid of interconnecting No. 3 steel reinforcing rod can serve as a support for the mesh. It should be welded at several locations to the mesh to ensure electrical conductivity between segments.

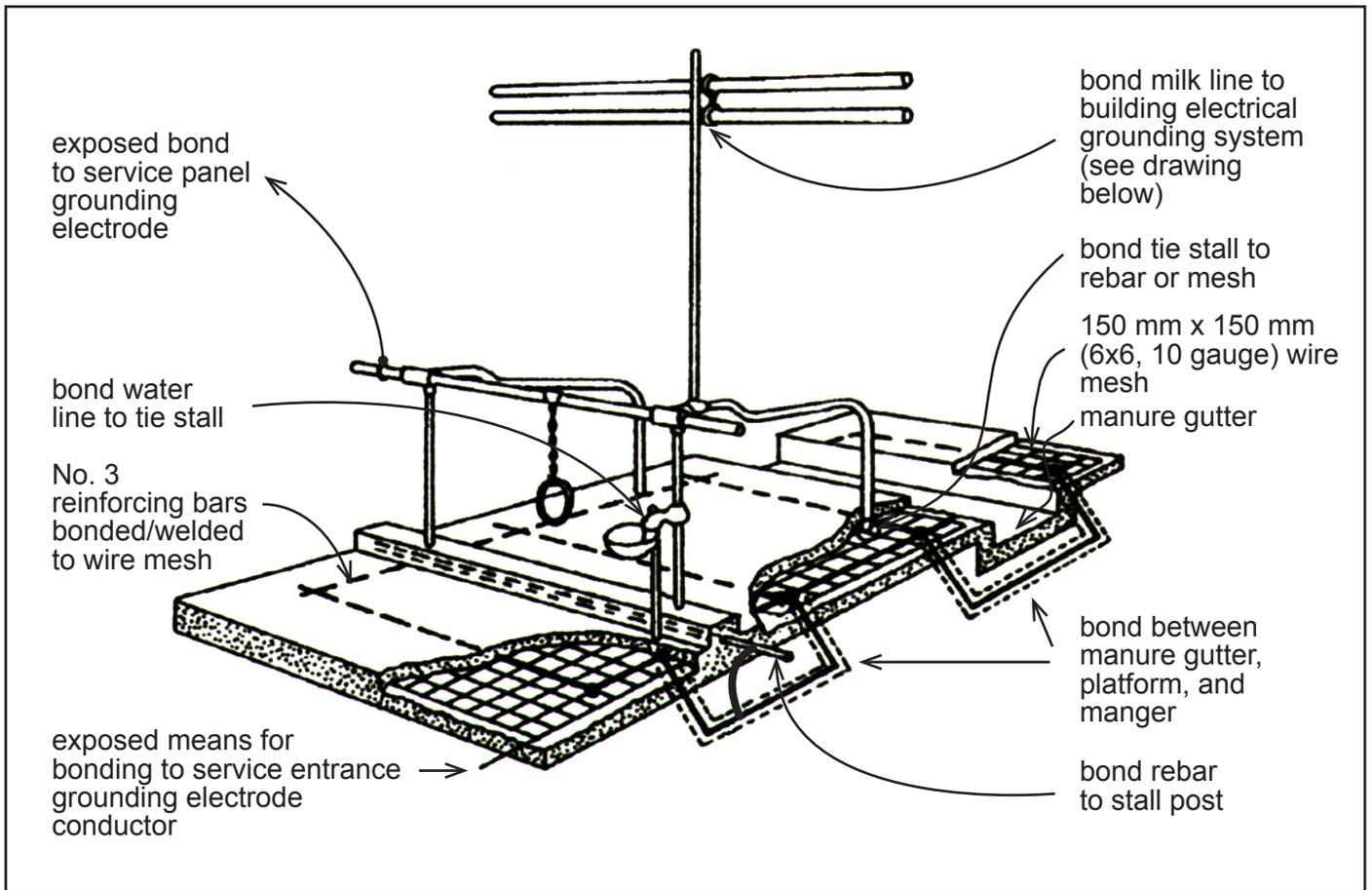
The supporting rebars can also ensure that at least 4 centimetres (1.5 inches) of concrete is above and below the wire mesh. In a 60- to 80-cow barn, two or three rebars the length of the floor, and three or four rebars across the floor of each side and alley have proven effective.

Bonds – Bonds should be made where reinforcing steel or wire mesh cross. All metal conductors should be bonded to one another and bonded to the grid so that the complete interior of the milking parlour is electrically grounded. This is the most effective solution to achieve a zero voltage difference between the cow and the equipment in the parlour and stall. Multiple bonds at connections between the wire mesh and other equipment give the system continuity, even if some bonds fail.

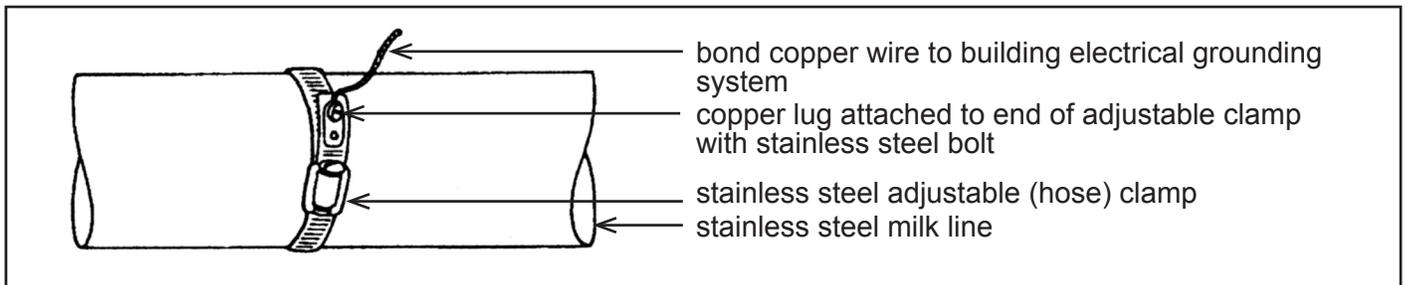
Electrically conductive bonds can be created by welding, brazing, or using clamps and compression connectors. Even when small amounts of corrosion occur, compression connections and clamps may be rendered ineffective. Welding or brazing is the preferred method to obtain a permanent electrical connection.

Equipotential plane before the concrete floor is poured. After the pour, the piece of rebar welded to the plane will project above the floor where it can be used to ground a water trough, eliminating a possible source of stray voltage at the trough.





Installation of an equipotential plane in a tie-stall barn



Bonding a milk line



Equipotential planes using rebar in the milking parlour and loafing area, in position before concrete is placed. A grid size of 15 cm x 15 cm (6 in. x 6 in.) is recommended for the milking parlour, 30 cm x 30 cm (12 in. x 12 in.) elsewhere.



Stanchion bonded by welding a piece of rebar to its base and to the rebar that forms the equipotential plane.

Rebar welded to intersecting rebar to ensure equipotential plane is continuously conductive

The following equipment and components should be bonded to the wire mesh or rebar in the floor:

- stanchions
- stall partitions
- metal posts or columns
- water line (if metal)
- milkline (if metal)
- vacuum line (if metal)
- waterers
- feeders.

To bond stanchions and tie stalls to the wire mesh:

- lay a steel reinforcing rod in the front curb to bond the posts to the mesh; or
- bond the back post of the partitions to one another and to the mesh in the stall platform.

When bonding a stainless steel milkline to the stalls, use a stainless steel clamp. To protect against possible corrosion, do not allow copper or other types of steel to come into direct contact with a stainless steel milkline.

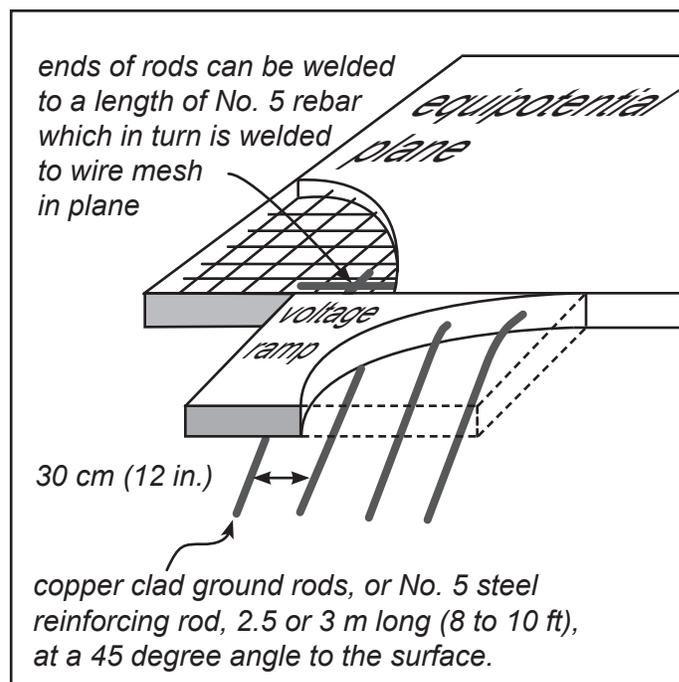
Exposed bond – An exposed bond is required so that you can check the connection between the equipotential plane and the building ground electrode system. There are several methods of producing this exposed bond:

1. Steel reinforcing rods not smaller than No. 3 (10 millimeters or 3/8-inch diameter) can be bonded to the wire mesh and left protruding from the concrete. The protruding rebars are then connected to the building grounding system to produce a visible bond.
2. Bond bare copper conductors to the wire mesh and leave them protruding from the concrete. The exposed conductors are then connected to the building grounding electrode system to produce the visible bond.
3. Bare copper conductors can also be connected between the building grounding electrode system and stanchion metal or other metalwork that has been bonded to the wire mesh at numerous locations.
4. The exposed bonding conductor from the equipotential plane can be connected directly to the building grounding electrode system at the building's service entrance panel, or to any equipment that is, in turn, electrically connected to the electrode system at the service entrance, such as a metal water line.

Voltage gradient ramp – Voltage ramps set up a gradual change in voltage potential that livestock may encounter. The gradual change reduces the likelihood of discomfort or stress when animals are stepping on or off the equipotential plane.

You can make an effective transition area at livestock entrances or exits by extending the equipotential plane outward and downward at 45 degrees to the surface, as shown in the drawing.

Use 2 1/2 or 3 metre-long (8-10 foot) copper clad ground rods or No. 5 rebar. The rebar should be spaced no more than 30 centimetres (12 inches) apart with enough rods to span the width of the entrance or exit. Electrical connections bonding the equipotential plane and the grounding rebar should be encased in concrete.



Installation of a voltage gradient ramp

Retrofit construction

Most barns can be retrofitted with an equipotential plane – an appropriate and cost-effective method of minimizing stray voltage levels. You should analyse the sources and levels of stray voltage before you install an equipotential plane to determine if one is required.

Retrofit construction options:

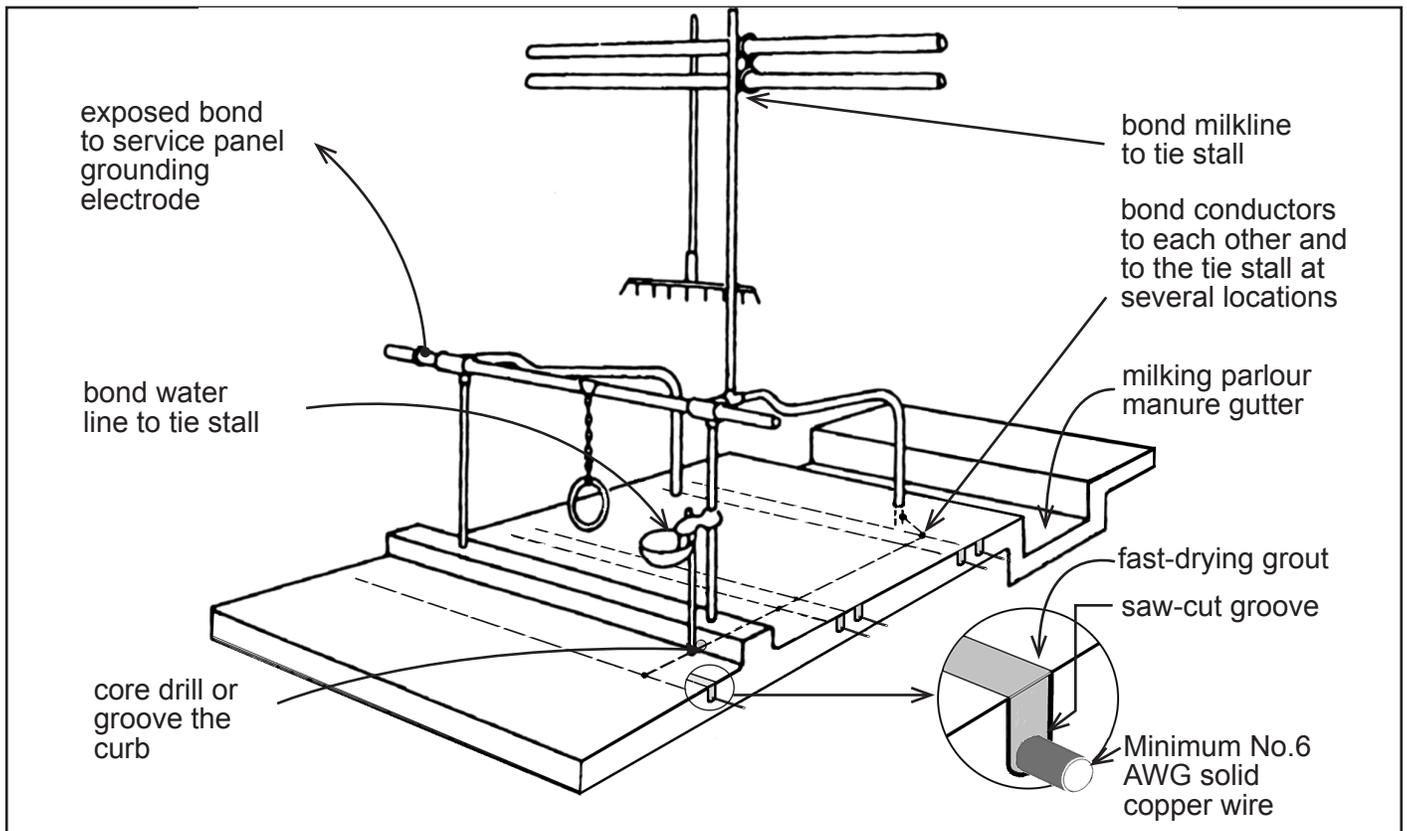
Groove existing floor – Where the floor has steel rebar, a satisfactory alternative to embedding wire mesh is to grout, as a minimum, No. 6 AWG bare copper wires into slots cut in floors where the cows stand. Wires do not need to be larger than No. 4 AWG.

Use a concrete saw to cut grooves 6 millimetres wide by 38 millimetres deep (1/4-inch by 1 1/2-inches) on your barn floor in the feed manger, front- and rear-hoof area, and, if necessary, the walk alley.

For the front hoof area, place two conductors 30 to 45 centimetres (12 to 18 inches) apart, with the first located 15 to 25 centimetres (6 to 10 inches) from the front curb.

For the rear hoof area, place two conductors 30 to 45 centimetres (12 to 18 inches), starting 7 to 15 centimetres (3 to 6 inches) from the gutter. The conductors should be bonded together; and to the stall work and to metal water lines. One or two conductors should be placed in the central area of the feed manger. Two conductors can also be placed in the centre alley, where voltage readers show that the centre alley needs an equipotential plane.

Due to the limitations of the concrete sawing equipment, the exact location of where you place the grooves depends on the arrangement of the stall dividers and stanchions. With the bare copper wires in the grooves, bond them together at several points along the length of the barn. The number of bonding points and their locations will depend on the layout of the facility.



Retrofit equipotential plane in a tie-stall barn

Use a quick-setting grout to fill the grooves and finish the installation. At a minimum, bond the wires at each end of the barn, and to the stanchions, milkline (if metal), waterline and any other metal structures in the barn.

Milking parlours and holding areas can also be retrofitted with this method. If you are installing a retrofit plane in a milking parlour, you may need to place wire in areas where cows stand to be milked, under the worker area of the pit floor and the livestock walk aisles.

To ensure all cow contact areas are bonded together, you will need to bond plane wires to the milkline (if metal), steel partitions and the feeders.

All bonding should be done by welding or by using pressure-type connections. If possible, the copper wire should also be connected to the rebar.

Capping the floor – Another method of retrofitting your barn with an equipotential plane is to lay wire mesh on the old concrete, bond it to all metal components, and then “cap” the floor by pouring a new 8 to 10 millimeter (3 to 4 inches) thick layer of concrete. The wire mesh can sit directly on the old surface.

This method might not be practical because it is time-consuming and will raise the level of your barn floor. It might also be inconvenient if your livestock needs access to the area during installation. However, if you are replacing corroded stanchions, this method might be the most cost-effective for you.

New floor – Another option is to completely remove your old concrete floor and lay a new one with the wire mesh installed. This method is the same as new construction but it might be inconvenient if livestock are to be housed in the area during construction.

Other options

Alternate equipment is available on the market to reduce stray voltage. For details, contact your dairy equipment supplier.

For more information

If you have questions or concerns about stray voltage, or would like to have a copy of this data sheet contact your local District Office.

You can also consult the following publication, which served as source material for the data sheet: Equipotential Plane in Livestock Containment Areas (ASAE EP473.2 Jan01), prepared by the American Society of Agricultural Engineers.



TABLE 1: Stray Voltage Measurements

Use this table to record voltages measured between two points that may be simultaneously contacted by livestock.
Take all measurements with a 500-ohm resistor. Record voltages at several locations in the barn while milking equipment is running and cycling normally. Note which equipment is running during measurements.

COW CONTACT POINTS		Volts (AC)	Equipment Running
<i>FROM</i>	<i>TO</i>		
Drinking cup	Floor	_____	_____
Stanchion	Floor	_____	_____
Waterer	Floor	_____	_____
Floor of manure gutter	Floor of animal area.....	_____	_____
Floor of manure gutter	Feeders and waterer.....	_____	_____
Floor of manure gutter	Metal cluster on milker.....	_____	_____
Points on floor covered by animal's feet		_____	_____
Floor at animal's front feet.....	Metal feeders & waterers	_____	_____
Floor at animal's rear feet	Metal feeders & stanchions	_____	_____
Stanchions.....	Other metal parts such as:		
	vacuum lines	_____	_____
	water lines.....	_____	_____
	milk lines.....	_____	_____
	feeders	_____	_____
	waterers	_____	_____

TABLE 2: Neutral-to-Earth Voltage Readings

Use this table to record voltages measured between a reference ground and various pieces of metal equipment and the floor. Measurements are taken without a 500-ohm resistor. Voltages are *not animal contact voltages*, but they can be useful in diagnosing their origins.

CONTACT POINTS FOR DIAGNOSTIC READINGS		VOLTS AC	VOLTS AC
<i>FROM</i>	<i>TO</i>		
Bulk Tank	Remote Reference Ground	_____	_____
Milkhouse Floor Drain	Remote Reference Ground	_____	_____
Milk Pipeline	Remote Reference Ground	_____	_____
Water Pipe	Remote Reference Ground	_____	_____
Barn Entrance Panel	Remote Reference Ground	_____	_____
Water Bowl	Remote Reference Ground	_____	_____
Stanchion (loafing area)	Remote Reference Ground	_____	_____
Stanchion (milking parlour)	Remote Reference Ground	_____	_____

TABLE 3: Stray Voltage Checklist

This table is designed to help with a visual inspection of dairy barn electrical systems and note potential stray voltage sources. A check mark placed in the "yes" column indicates a potential problem. A qualified electrician should be contacted for the repair or replacement of electrical equipment or wiring that may be needed.

	YES	NO
MAIN FARM ELECTRICAL SERVICE		
Connection to the ground rod - loose, corroded.....	___	___
Ground rod(s) missing at the service entrance	___	___
BARN SERVICE ENTRANCE		
Ground rod(s) missing at the service entrance	___	___
Connection to ground rod(s) - loose, corroded.....	___	___
Large accumulation of feed dust or other debris on service box	___	___
Corroded or loose neutral connection	___	___
Panel cover missing or removed	___	___
MILKHOUSE		
Broken or missing bonding strap for milklime	___	___
Damaged or missing seals on electrical fixtures, switches, outlets, lights, etc.	___	___
Corrosion of electrical fixtures	___	___
IN THE PARLOUR OR AROUND THE BARN		
Milking pump electrical supply		
—Pinched wires	___	___
—Loose, hanging wires, stripped screws	___	___
—Scrapes, breaks or cracks in insulation exposing the conductors	___	___
Loose, hanging wires	___	___
Broken or bent conduit	___	___
Energized open wires taped or untaped and extending from ceiling or wall, not in a junction box	___	___
120-volt non-polarized or non-grounded appliances used in barn..... (clocks, heaters, radios, stereos, etc.)	___	___
Cow trainer insulators broken, missing, dirty or covered with whitewash	___	___
OTHER PROBLEMS		
Light dimming when motors start	___	___
Electrical shocks from any equipment	___	___
Wires, electrical boxes or motors in wet or damp areas	___	___
Frequent fuse or circuit breaker operation	___	___
Electric fence or cow trainer bonded to farm electric system ground	___	___
Electric fence or cow trainer bonded to water or milk lines or stanchions	___	___
Bent or broken conduit	___	___
Damaged wire insulation exposing conductors	___	___
Insulated wires wrapped around metal pipes	___	___
Damaged or frayed extension cords	___	___
Motors, operating irregularly under load, sparking, etc.	___	___
Electrical outlets not properly bonded or will not accept a three-prong plug	___	___

The information contained in this pamphlet is published as a convenient reference for Manitoba Hydro's customers and is distributed without charge. While every effort has been made to provide accurate and complete information, Manitoba Hydro does not warrant the accuracy or efficacy of this information. Manitoba Hydro will not be liable for any loss, costs, damage, or injury whatsoever, resulting from the use of this material.

TECHNICAL MEMORANDUM

TO: Mr. Trevor Joyal, Manitoba Hydro
FROM: Gabor Mezei, M.D., Ph.D.
William H. Bailey, Ph.D.
DATE: February 19, 2015
SUBJECT: Noise, Heat, and Cattle

The scientific literature is quite extensive on the effects of heat stress on various aspects of cattle wellbeing and physiological responses of cattle to heat. Without attempting to provide a comprehensive review of the literature, some recent research results in this area are highlighted.

While cattle are able to maintain their body temperatures within a tight range over a wide extent of environmental conditions and ambient temperatures, heat stress has been identified as a major contributor to poor animal welfare and mortality among cattle during long distance transportation of live animals (Caulfield et al., 2014; Philips et al., 2013).

Increasing heat load may result in several responses in cattle, including more time spent standing. Recent cattle management trials conducted in three states in the United States (Arizona, California, and Minnesota) demonstrated that cows would respond to mild to moderate heat stress that results in increased core body temperatures by spending more time standing (Allen et al., 2015). These results suggest that standing contributes to the physiological process of cooling.

Heat stress was also shown to reduce milk secretion in dairy cows (Silanikove et al., 2009) and influence hormone levels (Bova et al., 2014). Maternal heat stress in cows may reduce mammary growth and subsequent lactation, and may also have a carryover effect on the postnatal growth of offspring, potentially from compromised immunity suffered due to parturition heat stress (Tao et al., 2013).

A cursory search of the literature did not identify studies specifically examining noise on cattle wellbeing or physiologic changes, but noise exposure has been identified as a potential stressor for cattle during handling and transportation (Grandin, 1998; Phillips et al., 2013).

Transmission Lines are not a Source of Harmful Noise and Heat to Cattle

The sound from the conductors of high-voltage transmission lines is very weak and not concentrated at specific frequencies that would aid detection. Transmission lines of Manitoba

Hydro are designed to meet applicable provincial and local noise guidelines and ordinances, and any audible noise from the transmission lines will be below the specified noise limits in fair weather. In foul weather, noise levels from alternating current transmission lines may increase; however, other weather components, such as wind and rain, will likely mask any noise increases that may be the result of foul weather. In addition, audible noise from transmission lines quickly diminishes with distance from the lines. Thus, audible noise from transmission lines is not a source of disturbance for cattle. This is confirmed by observations that transmission lines do not have any long-term effect on the grazing or movement patterns of cattle, or even wild deer and elk (Goodwin, 1975; Rogers et al., 1982).

Some of the energy transmitted via electric current flowing through transmission line conductors is lost due to electrical resistance of the conductors and is transferred into heat energy. This may result in heating of the conductors. This resulting heat, however, only affects ambient air temperature within a few centimeters of the conductors, and will have no effect on the air temperature at or near ground level, several meters from the conductors, where farm animals may be present. Thus, heat from transmission lines is not anticipated to affect ambient air temperature for farm animals even directly under the transmission lines.

References Cited

Allen JD, Hall LW, Collier RJ, Smith JF. Effect of core body temperature, time of day, and climate conditions on behavioral patterns of lactating dairy cows experiencing mild to moderate heat stress. *J Dairy Sci* 2015; 98 :118–127.

Bova TL, Chiavaccini L, Cline GF, Hart CG, Matheny K, Muth AM, Voelz BE, Kesler D, Memili E. Environmental stressors influencing hormones and systems physiology in cattle. *Reprod Biol Endocrinol* 2014; 12: 58.

Caulfield MP, Cambridge H, Foster SF, McGreevy PD. Heat stress: A major contributor to poor animal welfare associated with long-haul live export voyages. *Vet J* 2014; 199: 223-228.

Goodwin JG. Big Game Movement Near a 500-kV Transmission Line in Northern Idaho. Prepared for the Bonneville Power Administration, Engineering and Construction Division, Portland, OR. Intern with the Western Interstate Commission for Higher Education (WICHE), Resources Development Internship Program (RDIP). Boulder, CO. June 27, 1975.

Grandin T. Handling methods and facilities to reduce stress on cattle. *Vet Clin North Am Food Anim Practice* 1998; 14: 325-341.

Phillips CJ, Santurtun E. The welfare of livestock transported by ship. *Vet J* 2013; 196: 309-314.

Rogers LE, Warren NR, Hinds KA, Gano RE, Fitzner RE, Peipel GF. Environmental Studies of a 1100-kV Prototype Transmission Line: An Annual Report for the 1981 Study Period. Prepared

Mr. Trevor Joyal
February 19, 2015
Page 3

by Battelle Pacific Northwest Laboratories for Bonneville Power Administration. Portland, Oregon. 1982.

Silanikove N, Shapiro F, Shinder D. Acute heat stress brings down milk secretion in dairy cows by up-regulating the activity of the milk-borne negative feedback regulatory system. *BMC Physiol* 2009; 9: 13.

Tao S, Dahl GE. Heat stress effects during late gestation on dry cows and their calves. *J Dairy Sci* 2013; 96: 4079–4093.

When and How Does Vegetation Management Occur?

Safety - Electricity can be deadly, that's why only qualified line personnel may perform work near energized conductors. Landowners should never attempt to trim or remove tree limbs near or adjacent to any power lines. If you're concerned about a tree that appears to be too close to a power line, please contact us at 1-888-624-9376.

Tree Removal - In our efforts to comply with international regulation and to better ensure reliability, our Transmission Line Vegetation Management Program emphasizes tree removal to promote effective long-term control. In many cases, this means removing trees in areas where trees have only been trimmed in the past.

Vegetation Clearing - Manual and mechanized clearing methods are used when the vegetation has become too tall for herbicide applications.

Herbicide Application - Herbicides are applied to control the root systems of deciduous woody-stemmed vegetation and to reduce the cost of future maintenance, by reducing future workloads. All Herbicide use is reviewed and regulated by the Pesticide Section of the Environmental Assessment and Licensing Branch of Manitoba Conservation. The herbicides are applied by licensed applicators.

Debris Cleanup - Debris that results from our clearing activities is typically left on the rights-of-way to naturally decompose and return nutrients to the soil and reduce the possibility of soil erosion. Any brush that falls into roadways, waterways, fences, lawns or pastures or other maintained areas is collected and disposed of.

Danger Trees - "Danger Trees" are large trees growing along the edge of the right of way that are tall enough that if they fell, have the potential to hit the line. Not all "Danger Trees" are removed, but some are evaluated according to species, growth patterns, location, structural defects, disease and insect damage, and decay. A "Danger Tree" that shows defects according to these criteria is classified as a "Hazard Tree", which requires immediate removal.

The Manitoba Hydro Act

Section 24 of the Manitoba Hydro Act outlines the responsibility of Manitoba Hydro to trim and fell trees where they pose a risk to the public or equipment of the corporation or otherwise constitute a hazard.

For further details please refer to The Manitoba Hydro Act: www.web2.gov.mb.ca/laws/

Transmission RIGHT OF WAY

Tree Clearing & Maintenance



Sometime soon, vegetation growing around the transmission powerline near your property will be receiving maintenance. This brochure addresses questions you may have about the work being done near your home.

Why manage vegetation?

North America demands a safe, reliable electric grid, and Manitoba Hydro's transmission lines are a significant contributor to this continental system. In Manitoba, almost 12,000 kilometers of transmission circuits help move electricity from hydro generating stations in northern Manitoba and on the Winnipeg River to customers in Manitoba and beyond.

Recognizing the need to safeguard the reliability of our transmission delivery system, and your electric service, our vegetation management program addresses the need to manage the growth of trees around our transmission facilities, while respecting the natural environment that surrounds them.

When vegetation comes in contact with or grows close enough to the conductors (wires) there is risk of electrical arcing or flashover. This can cause wide-spread power outages and/or fires. Vegetation control ensures the safety of the public, of private property, as well as reliable electrical service. Vegetation control is also necessary to maintain access to the right-of-way for both emergency and routine maintenance of the lines.

Federal Requirements

In August 2003, a major power outage struck southeastern Canada and northeastern United States. Investigators have determined that a tree that had come in contact with a transmission line was the root cause of the blackout.

As a result of that event, international standards, with substantial penalties for non-compliance, were created governing vegetation management practices for lines that are considered part of the international transmission grid. The North American Electric Reliability Corporation (NERC), with input from industry and other stakeholders, under the direction of the Federal Energy Regulatory Commission (FERC), developed standard, FAC-003. The standard mandates, among other requirements, a robust vegetation management program that ensures that the minimum clearance distance between transmission lines and the nearest vegetation are not violated.

To conform to this standard and better ensure the reliability of the transmission system, Manitoba Hydro's policy is to encourage compatible, low-growing species to remain. Although there is no guarantee, we do attempt to work with landowners to determine if trees and other vegetation deemed compatible with the safe operation of the line may remain.

Integrated Vegetation Management (IVM)

At Manitoba Hydro, Integrated Vegetation Management (IVM) involves a written management plan that utilizes best management practices endorsed by the North American Transmission Forum. Prior to vegetation management, rights of way are patrolled and management methods are selected. Methods are determined according to safety, health, environmental sensitivities, efficiency and cost. Methods of control include chainsaws, brush saws, mechanical mowing/mulching, herbicide applications, and land-use conversion. Herbicide applications are intended to selectively remove tall growing tree species, allowing low growing species to thrive. This early successional habitat has been proven as beneficial

to wildlife. If you are the type who spends time tending your lawn or garden, you know controlling weeds is a tough job. Imagine the problems Manitoba Hydro has with the brush and invasive weeds along our thousands of kilometers of transmission powerlines. Selectively controlling trees along powerlines and other rights-of-way helps keep the power on. It ensures safe and easy access for service and maintenance needs, and also preserves and even enhances the natural surroundings - including wildlife habitat - for all to enjoy.

Trimming and cutting while important in maintaining powerline rights-of-way often trade one problem for another. Cutting only removes plant tops (stems, branches and leaves) - the root systems remain intact. This promotes rapid resprouting and spreading of some species. Later, where one tree had grown, several more grow back. Herbicides, on the other hand, control the entire plant (including the roots). This eliminates the need for frequent mechanical treatments, like tree trimming and mowing. Herbicide applications mean less erosion, soil compaction and ruts caused by heavy machinery. In a 50-year ongoing study, Purdue University and Pennsylvania State University researchers have studied differences between selective herbicide use and mechanical methods on powerline rights-of-way. Results show that the selective use of herbicides enhance wildlife habitat by promoting grasses, forbes, low-growing shrubs and other ground cover that birds, moose, deer, small animals, bees and butterflies prefer.

If you have a question or concern about our transmission right of way vegetation management program, please contact us at **1-888-624-9376**.

Appendix D

D1 – Public Open House Story
Boards and Handouts

D2 – Sample Comment Sheet

D3 – Sample Landowner Form

Manitoba-Minnesota Transmission Project Comment Sheet

January 2015

1. How did you hear about this open house? (Please check all that apply.)

- Postcard Letter Newspaper Website Phone Poster
 Email Social media Radio Word of mouth Other _____

2. Do you live within one (1) mile of the Preferred Route? Yes No

If unsure, please see a Manitoba Hydro representative.

3. Have you attended a previous open house for this project? Yes No

4. Did you find the project information helpful? Yes No

5. What additional information would you like to have regarding the project?

6. Would you like to sign up for the Manitoba-Minnesota Transmission Project update emails (optional)?

email address: _____

How is your feedback used?

The information collected during public engagement is reviewed by the project team and enhances the environmental assessment being undertaken by discipline specialists. Information about your property and areas you use for fishing, hunting and recreational activities can provide the project team with a better understanding of how the land is used.

7. Do you visit or use any areas near the Preferred Route? Yes No

If yes, please describe:

8. Do you have any concerns or recommendations about the Preferred Route? If so, please fill in the following table using the example below. *If you require a map, please ask a Manitoba Hydro representative.*

Impact/Concern	How can we minimize the potential impact/concern?	Specific Location
<i>For example: the route is crossing land that is open and close to our garage at the back of our property.</i>	<i>For example: the route could be moved 200 ft. further east towards the treed area at the back of our property.</i>	<i>For example: NW36-55-20E1 or Plan 00011-Lot 7-Block 2.</i>

Please provide any additional comments/concerns/issues you have regarding the project:

Thank you for taking the time to provide your feedback.

You can complete this questionnaire online at www.hydro.mb.ca/mntp or provide your feedback by email at mntp@hydro.mb.ca

Appendix D

D1 – Public Open House Story
Boards and Handouts

D2 – Sample Comment Sheet

D3 – Sample Landowner Form

Land Use

6. Are you the sole owner or do you lease the property in question?

- Own _____
 Lease _____
 Other _____

7. How is the land currently being used?

- Annual Cropping Hayland/Forage Pasture/Grazing Livestock Production
 Woodlot Farmstead Rural Residential
 Commercial/Industrial (Type) _____
 Other: _____

8. Please provide more details on your agricultural production system:

- If crop production, what types of crops are you growing? _____

- If livestock production, what types of animals are you raising? _____

- | | Yes | No |
|---|--------------------------|--------------------------|
| a) Do you use GPS guidance systems in your operation? | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Are any of your crops dependant on aerial application? | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Are your farming practices on the property in question organically certified? | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Is this an Intensive Livestock Operation? | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Are you spreading manure on the property? | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes, what method of application? | | |
| <input type="checkbox"/> Solid spreading <input type="checkbox"/> Liquid – tank <input type="checkbox"/> Liquid – drag line | | |
| f) Is your land irrigated? | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Is your land tile drained? | <input type="checkbox"/> | <input type="checkbox"/> |
| h) If applicable, please describe any speciality production on your farm. | <input type="checkbox"/> | <input type="checkbox"/> |
- _____

9. Atmospheric Environment

- How would you describe the existing noise on your property? Low Medium High
- What is the source of the noise? (ex: farm machinery) _____

10. Ground Water Resources

- | | Yes | No |
|--|--------------------------|--------------------------|
| • Are there existing wells on your property? | <input type="checkbox"/> | <input type="checkbox"/> |
| _____ | | |
| • Are they active? | <input type="checkbox"/> | <input type="checkbox"/> |

11. Fish and Fish Habitat

- | | Yes | No |
|--|--------------------------|--------------------------|
| • Are there fish habitats on your property? (e.g., stream, creek, pond)
If so: | <input type="checkbox"/> | <input type="checkbox"/> |
| • Which species of fish are found on your property? _____
_____ | | |
| • Do you fish or bait trap on your property? _____
_____ | | |
| • Do you allow members of the public to fish or bait trap on your property? _____
_____ | | |

12. Vegetation and Wetlands

- | | Yes | No |
|--|--------------------------|--------------------------|
| • Do you know of any rare plant species on your property?
_____ | <input type="checkbox"/> | <input type="checkbox"/> |
| • Do you know of any weeds on your property?
_____ | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are there wetlands/sloughs on your property?
_____ | <input type="checkbox"/> | <input type="checkbox"/> |

13. Wildlife (Birds, Mammals, Reptiles)

- | | Yes | No |
|---|--------------------------|--------------------------|
| • Does your property support wildlife habitat (i.e., uncultivated lands)? | <input type="checkbox"/> | <input type="checkbox"/> |
| • What kinds of animals do you see or hear on your property?
_____ | | |
| • Do frogs breed on your property in the spring? | <input type="checkbox"/> | <input type="checkbox"/> |
| • If you have a wetland or slough on your land, would you be
willing to have it surveyed to understand what wildlife are using it? | <input type="checkbox"/> | <input type="checkbox"/> |
| • Have you seen moose, elk, bear, wolves or coyotes on your property?
If so what time of year? _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| • Do you feed wildlife on your property?
If so, which animals do you attract (deer, elk, birds)? _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are you a trapper?
If so where is your trapline? _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| Have you noticed any change in furbearer abundance over the last 10 years? | <input type="checkbox"/> | <input type="checkbox"/> |

Appendix E

E1 – Stakeholder Group and
Landowner Meeting Minutes

E2 – Comment Sheet Data

E3 – Online Comment Sheet
Data

E4 – Landowner Form Data

E5 – Mapping Data

E6 – Email and Telephone
Summary

Record of Meeting - Manitoba Minnesota Transmission Project - Round 3		
General Information		
Title	Manitoba Chamber of Commerce Round 3 Meeting	
Community / Participant	Manitoba Chamber of Commerce	
Round	Round 3	
Date of Meeting	Thursday, March 26, 2015	
Location	Manitoba Chamber of Commerce - 227 Portage Ave	
In Attendance	Manitoba Hydro - (2) Manitoba Chamber of Commerce – (2)	
Recorded by	Manitoba Hydro	
Meeting Description: Meeting with Manitoba Chamber of Commerce. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The Manitoba Chamber of Commerce representative asked what kind of attendance has Manitoba Hydro seen at the project open houses.	The Manitoba Hydro representative replied that to date, over 400 people attended open houses for Round 3.
2	The Manitoba Chamber of Commerce representative asked why did Manitoba Hydro choose to not go to the east for the route?	The Manitoba Hydro representative explained that the routes to the east are harder to access as there are a lot of swampy areas, the proximity to D602F hinders reliability, the Province has indicated there are many protected areas and areas of interest they would like us to avoid and there are many wildlife corridors that could be disrupted
3	The Manitoba Chamber of Commerce representative asked what kind of feedback has been received during the open houses?	The Manitoba Hydro representative replied that the largest issue has been the proximity of the line to the Town of La Broquerie due to concerns around EMF and the growth of the community.
4	The Manitoba Chamber of Commerce representative asked if this line connects to Bipole III.	The Manitoba Hydro representative replied Bipole III will connect to the Riel Converter Station whereas this project starts from the Dorsey Converter Station.
5	The Manitoba Chamber of Commerce representative asked how many affected landowners are there?	The Manitoba Hydro representative replied that there are 139 affected landowners.
6	The Manitoba Chamber of Commerce representative asked what is the process for ancillary damage compensation?	The Manitoba Hydro representative explained that landowners will be put in touch with their Manitoba Hydro Property Agent. The agent would come out and have a discussion with the land owner and Manitoba Hydro would pay the landowner for the cost of the damages. It would be up to the landowner to use the funds to fix the damages as they deem appropriate.
7	The Manitoba Chamber of Commerce representative asked how long would the highway be shut down for during construction?	The Manitoba Hydro representative that the stringing of wire from one tower to another would be a very short process and would not cause any major delays.

8	The Manitoba Chamber of Commerce representative asked what season is construction typically done in?	The Manitoba Hydro representative replied that construction can occur anytime however winter is preferred as there is less damage to the land and less impact on agricultural operations.
9	The Manitoba Chamber of Commerce representative asked how are the construction contracts determined?	The Manitoba Hydro representative described that work done through the contract process is RFP'd through the Manitoba Hydro purchasing department. The RFP's will consider local businesses. They could be done as one full contract or
10	The Manitoba Chamber of Commerce indicated their support for the project and offered to share project information with their member Chambers	The Manitoba Hydro representative noted the comment.

Record of Meeting - Manitoba Minnesota Transmission Project - Round 3		
General Information		
Title	Round 3 Meeting with Keystone Agricultural Producers (KAP)	
Project	Manitoba Minnesota Transmission Project	
Participant	<u>Keystone Agricultural Producers</u>	
Round	<u>Round 3</u>	
Date of Meeting	Friday, March 06, 2015	
Location	1700 Ellice Ave	
In Attendance	Manitoba Hydro (2) and 5 KAP Representatives	
Recorded by	Manitoba Hydro	
MEETING DESCRIPTION		
KAP was provided with the following project related materials:		
<ul style="list-style-type: none"> - Presentation - 5 E-sized project maps - Route Selection Brochure - Compensation Package - AC Brochure - VC Handouts: Agriculture, Public Engagement Process, Environmental - Assessment and Regulatory 		
The meeting began with Manitoba Hydro going through the presentation and addressing the following comments and questions.		
DISCUSSION		
Item	Community / Participant Comment	Manitoba Hydro Response
1	A KAP representative asked why expansion plans are needed at Glenboro Station.	The Manitoba Hydro representative explained that the system both within the province and internationally is quite interconnected and to ensure reliable flows in and out of province additional equipment will be required for the Glenboro station. The Manitoba Hydro representative explained the notification and involvement process for the public in the area that was undertaken as part of Round 1 of the Public engagement process.
2		The Manitoba Hydro representative outlined that the self supporting towers will be used in cultivated agricultural areas with a right of way width of 80m. An estimated base of 9mx9m was also presented for in line structures.
3	A KAP representative asked what the Brandon to Neepawa line voltage would be.	The Manitoba Hydro representative noted that the voltage would likely be 230kV or a 115kV at a minimum. Note: There are two lines running between Brandon and Neepawa. One a 230kV line and one 115kV line.
	A KAP representative asked a question regarding maximum sag of the line.	The Manitoba Hydro representative explained that the line would meet all CSA standards for design.
5	A KAP representative indicated that with the changes in technology and equipment the CSA standard may not be the most adequate measure.	The Manitoba Hydro representative noted the concern.
6	A KAP representative indicated that many of the concerns for local operators are not transmission lines but distribution lines. It was noted by KAP that distribution lines should be heightened at access points to fields. It was also noted that when crews are undertaking the construction for this line there should be a desire by Manitoba Hydro to work with affected landowners to address distribution issues located on their property. This would be viewed as a direct benefit to the agricultural operator.	The Manitoba Hydro representative noted the concern.
7	A KAP representative asked as to how many affected landowners have been talked to.	The Manitoba Hydro representative indicated that of 140 discussions with approximately 60% had taken place. It was also mentioned that larger operators and Hutterite colonies were also part of discussions but were counted as one entity.
8	A KAP representative mentioned that in addition to distribution modifications for affected landowners there should be a drive from Manitoba Hydro to promote three phase power in rural Manitoba as many operations using irrigation or grain driers require it.	The Manitoba Hydro representative noted the recommendation and will be considered by the company.

9	A KAP representative indicated that they had heard many concerns regarding the proximity of the proposed line to homes, and asked what consideration was given to homes in routing.	The Manitoba Hydro representative explained that proximity to homes is considered in routing and that the transmission line would be built to guidelines set forth by international agencies.
10	A KAP representative mentioned that the 75m voluntary buyout may not be representative of the public's desire to live in proximity of transmission lines.	The Manitoba Hydro representative note the concern and discussed subdivision potential and zoning as it relates to the route selection process undertaken for this project.
11	A KAP representative indicated that if there is a 75 meter buy-out being offered for residences Manitoba Hydro should consider the same type of policy for hogs or dairy cattle.	A Manitoba Hydro representative indicated that the 75 meters is not associated with health concerns but more of a personal preference. It was also noted that proximity to these operations raises other concerns that are being addressed and mitigated for such as biosecurity and manure spreading.
12	A KAP representative discussed landowner liability, as many are concerned and contacting the KAP office with concerns and questions.	The Manitoba Hydro explained the Insurance Law resides in scenarios of tower damage. . Numerous claims will hinder insurability. Alana at KAP would like to continue the discussion regarding liability to assist in messaging to their members.
13	A KAP representative indicated that it is a risk to operators who have had previous claims and who may no longer be able to become insured. Alana at KAP would like to continue the discussion regarding liability to assist in messaging to their members.	The Manitoba Hydro representative took note of the request to continue discussions regarding liability.
14	The president of KAP indicated that he is on the CSA committee and would be able to assist transfer of information to and from that committee.	The Manitoba Hydro representative noted the offer.
	A KAP representative asked if Manitoba Hydro needs a green field clause for decommissioning.	The Manitoba Hydro representative noted that the life of the transmission lines will likely be long term and decommissioning is not taken into consideration
16	A KAP representative explained that there is a desire to continue ongoing discussions with Manitoba Hydro even when there is no project to be discussed.	The Manitoba Hydro representative indicated that developing a strong relationship and sharing information will assist all involved.
17	A KAP representative indicated the Manitoba Hydro should approach Pat Inc. & Farmers Edge as they are leaders in Trimble equipment in the Province.	The Manitoba Hydro representative noted the suggestion.
18	KAP asked what the export environment currently looked like for Manitoba Hydro.	The Manitoba Hydro representative noted that a division within Manitoba Hydro is continually trying to secure future sales of surplus power to the US. It was noted that Manitoba Hydro will have 49% of capital cost responsibility in the US with the intention of shedding ownership to other US entities in prior to in- service.
19	Meeting closed with the following notes: a) KAP can assist in communication b) Manitoba Hydro should consider three phase power and local distribution clearances as part of compensation c) Liability needs to be addressed and communicated from Manitoba Hydro and KAP d) Information being sent out by CAEPLA needs Manitoba Hydro responses.	
ACTION ITEMS		
ACTION ITEMS - ACTIVE ONLY		
-Consider three phase power and local distribution clearances as part of compensation		
-Continue liability discussions with KAP		
-Create CAEPLA responses		

Record of Meeting - Manitoba Minnesota Transmission Project - Round 3		
General Information		
Round	Round 3	
Community / Participant	Landowner	
Date of Meeting	Friday, January 30, 2015	
Location	Landowner's Residence	
In Attendance	Landowner (2), Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description		
A landowner meeting was held with the landowner and his business associate. Manitoba Hydro representatives gave the landowner a Round 3 newsletter, route selection handout, map, compensation brochure and EMF brochure.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The landowners asked if the route is set in stone?	The Manitoba Hydro representative explained that the route is not set in stone and they are writing an EIS which will be presented to the regulators to obtain a license to build.
2	The landowners asked if this is an export line?	The Manitoba Hydro representative explained that the project is for export purposes and can also import in emergency situations.
3	The landowners explained that they want to use the property for wildlife management, recreation, and hunting. All 8 quarters are affected even though the line goes through 2 of the 8 quarters. The landowner feels they should be compensated for more than just the right-of-way (ROW) as the project will affect the use of the entire property.	The Manitoba Hydro representative replied that Manitoba Hydro tries to understand how each landowner uses their land and much of this is derived through the public engagement process. While Manitoba Hydro does take into consideration the use of the whole property; however compensation is only for the ROW.
4	The landowners expressed that they would prefer to not have the line on their land at all as they feel the intended use of the property will be greatly affected. If Manitoba Hydro has not yet seen the property they cannot fully understand what is going on on the property.	The Manitoba Hydro representative indicated on the maps where there are already homes near the preferred route, which makes it very difficult to route the line. The information gathered today assists Manitoba Hydro to gain a full understanding of what is going on on the landscape in order to route the line with the least amount of impacts.
5	The landowners mentioned they also have game cameras on their property.	The Manitoba Hydro representative took note of this.
6	The landowners explained that they consider this land a wildlife management area and will be set up to be donated after they have finished using the property.	The Manitoba Hydro representative indicated that they understood this and also discussed the access management plans Manitoba Hydro implements as part of the project.
7	The landowners expressed concerns about the clear cut of the ROW.	The Manitoba Hydro representative indicated that there are potentially other options other than clear cutting in the ROW.

9	The landowners explained that they have worked hard to maintain this property and keep people out of the property. This has taken a long time and now Manitoba Hydro is proposing to open this right up.	The Manitoba Hydro representative took note of this.
10	The landowners expressed concerns that the value of the property for recreational uses is not being fairly valued.	The Manitoba Hydro representative explains that Manitoba Hydro monitors property values as much as possible but it is important to know that Manitoba Hydro negotiates in a one on one discussion with Manitoba Hydro property agents and the land owner once a license has been issued.
11	The landowners described a potential route adjustment: Road allowance 2 miles from the edge of the management area that appears to potentially be a better spot to route the line with less impact.	The Manitoba Hydro representative took note of this and will bring this recommendation forward to the project team for consideration.
12	The landowners explained that the south of their property is a cattle rancher whose land would be less impacted.	The Manitoba Hydro representative took note of this.
13	The landowners proposed to move the line over to the edge of the property and not through the middle.	The Manitoba Hydro representative took note of this.
14	The landowners made a suggestion to move the line to run through 29-4-8 which is on is crown land. Seems to be a trail right through this area. Suggestion to move line across this property.	The Manitoba Hydro representative took note of this.
14	The landowners mentioned that this is the first time the landowners have heard of this project.	The Manitoba Hydro representative took note of this and indicated there are a number of ways Manitoba Hydro tries to communicate the project to the public. The Public engagement program began in the fall of 2013 and since then numerous letters and postcards have been mailed out. Manitoba Hydro also advertises in newspapers, on the radio and puts up posters in many of the communities within close proximity to the project area.
15	The landowners asked why doesn't Manitoba Hydro parallel existing lines?	The Manitoba Hydro representative explained that Manitoba Hydro does in some areas, but in areas that are remote and difficult to access we do not want to parallel for reliability reasons.
16	The landowners asked if they want to build a cabin or other infrastructure near the line how far does it need to be away from the line?	The Manitoba Hydro representative answered that no infrastructure is allowed to built within the ROW.
17	The landowners expressed concern about access to their private property when a ROW is created. Not just physical access but visual access is also a problem.	Access will be addressed through the environmental assessment process. Manitoba Hydro will work with landowners once a licence is granted for the project.
18	The landowners asked if fire guard 13 is being looked at.	The Manitoba Hydro representative explained that the current route is the preferred route of Manitoba Hydro. This process captures information to finalize the placement of the transmission line.

19	The landowners asked why was the middle border crossing and the route east to their property removed?	The Manitoba Hydro representative explained that in in negotiation with Minnesota Power and through the feedback that was received from the public and discipline leads that the preferred border crossing area was that south of Piney.
20	Landowners requested that the form and the meeting notes be provided to them once entered.	Completed February 20.

Record of Meeting -Manitoba Minnesota Transmission Project - Round 3

General Information

Title Landowners - Round 3 Meeting

Community / Participant Landowner

Round Round 3

Date of Meeting Wednesday, March 18, 2015

Location Manitoba Hydro 820 Taylor Office

In Attendance Landowners (2), Manitoba Hydro (1)

Recorded by Manitoba Hydro

Meeting Description

The meeting was call by the landowners to discuss the Manitoba-Minnesota Transmission Project, to understand the regulatory review process that will be undertaken, discuss route modifications in relation to their property and to understand the construction process if the project is to move forward.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The landowners indicated they own 80 acres of land and it is estimate that the ROW will require 14-16 acres of land with the current alignment. They estimated that there will likely be 1-2 towers located on their land holding.	The Manitoba Hydro representative noted the property information.
2	The landowners asked how this new segment became part of the preferred route.	The Manitoba Hydro representative explained that various criteria goes into determining a preferred route and in this section there were concerns from local landowners regarding aesthetics, subdivision potential, and proximity to residences. It was noted that this segment moved the transmission line to back yards as opposed to front yards while taking into consideration technical restraints regarding the crossing of R49R. A discussion regarding the overall routing process was undertaken from study area to preferred route.
3	The landowners asked whether the structures would be guyed or self supporting.	The Manitoba Hydro representative replied that in this area a smaller right-of-way is preferred and that would be self supporting with a right-of-way width of 80m.
4	The landowners asked how clearing would be undertaken and what would be removed. There was a belief that all vegetation would be removed.	The Manitoba Hydro representative explained that clearing is undertaken to removal trees and that low lying vegetation would not be removed. They were concerned that the wetland would be stripped. It was outlined that the wetland on their property would not be stripped of vegetation. The Vegetation VC Handout was provided for further information.
5	The landowners asked about the next steps for the project.	The Manitoba Hydro representative outlined that the next step is to finalize the placement of the transmission line and complete an environmental assessment. A discussion on the MCWS process, possible CEC process and the NEB process was undertaken.

6	The landowners asked as to whether a conservation easement would restrict transmission line development.	The Manitoba Hydro representative replied that conservation easements would be considered and mitigation would be implemented to minimize any potential effects. Areas such as Watson P. Davidson WMA that is Hydro restricted under legislation were outlined.
7	The landowners indicated a route modification that they would like the Project team to consider when determining the final placement of the transmission line.	The Manitoba Hydro representative noted that the landowners preference is to A) have the route take advantage of more crown lands further east and off their property or B) if the route remains in the area, to move the line slightly further west to gain more separation from their future home site. This modification would gain separation from their site (~100m), be equidistant from their neighbors property and would not create further impact to those surrounding their property. A map was developed with the modification and is provided with the meeting summary. Modification will be considered during route finalization process.
8	The landowners asked how construction will be undertaken.	The Manitoba Hydro representative explained that the contract for construction would go to tender and process would be determined based on the bids received. It was noted that in wetland areas, winter construction is preferred to minimize any potential impact to vegetation.
9		The Manitoba Hydro representative outlined the compensation package and how/when this would occur. The Manitoba Hydro representative indicated that he would keep them informed as the process progresses and more information becomes available.

Record of Meeting -Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Round 3 Meeting with Landowner	
Community / Participant	<u>Landowner</u>	
Round	<u>Round 3</u>	
Date of Meeting	Tuesday, March 10, 2015	
Location	820 Taylor Ave.	
In Attendance	Landowner (1), Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description - Manitoba-Minnesota Transmission Project meeting with landowner.		
Owns 142 acres and was held in pasture previously. Sand and Gravel deposits along the ridge that travels through the entire property. Current Preferred route located 1/3 mile through the property.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The Landowner explained he had drill holes, undertaken by Maple Leaf, at two locations on the property. On the southern boundary along PR 501 they were unable to hit limestone at 95ft. On the western boundary along Monominto they hit stone at 25-30 feet. The general finding from the drilling is the smaller stone is located along 501 and larger stone along Monominto road.	The Manitoba Hydro representative took note of this.
2	The Landowner asked if this line is final.	The Manitoba Hydro representative explained that this line is preferred and that all feedback brought forward from the environmental assessment team and from the public will be considered when determining the final placement of the transmission line. Manitoba Hydro also will not consider the route final until the project receives regulatory approval.
3	The Landowner asked when a licence is anticipated?	The Manitoba Hydro representative explained that the licence is anticipated in 2017 with construction beginning after Manitoba Hydro receives the licence. Prior to the licence, there may be some appraisal work undertaken but no land acquisition will be undertaken until after a licensing decision is made. Land agents will be out following a licence and if needed, expropriation will follow.
4	The Landowner indicated that the 18 acre parcel on the SE corner has had measurements of 100ft of sand and gravel.	The Manitoba Hydro representative took note of this.
5	The Landowner asked about the route selection process.	The Manitoba Hydro representative discussed the route selection process and how 550,000 thousand options were narrowed to five with one route determined as the preferred route.

6	The Landowner indicated that if the line were to be on the property, he does not believe there is any place on the quarter section to develop a home.	The Manitoba Hydro representative explained expropriation, gross value of gravel in the land, and the Land Appraisal commission process with the landowner. As part of the appraisal process the highest and best use of land (being gravel) would be considered as part of the appraisal process to determine a compensation package for an easement.
7	Mr. Rosza indicated that with a licence pending till 2017, what if a home were to be developed within the right-of-way.	The Manitoba Hydro representative explained that the public engagement team tries to reach as many people as possible to avoid this scenario whereas if it were to occur there is a possibility to reroute directly around the home or to purchase the home at market value.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Landowner - Round 3 Meeting	
Community / Participant	<u>Landowner</u>	
Round	<u>Round 3</u>	
Date of Meeting	Thursday, January 29, 2015	
Location	Manitoba Hydro 820 Taylor Office	
In Attendance	Landowners (2), Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description -Meeting with MLO 1223		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The landowners asked where is Manitoba Hydro planning to place the route along the floodway.	The Manitoba Hydro representative replied that the transmission line will be on the southern berm of the floodway. Manitoba Hydro is working with the Floodway Authority.
2	The landowners asked if GPS systems are affected by the transmission line?	The Manitoba Hydro representative replied that GPS units are not affected by electric and magnetic fields from transmission lines. An "AC Lines & Electronic Devices" brochure was provided for further information.
3	The landowners asked about the compensation package for the project.	The Manitoba Hydro representative explained that compensation would provide 150% of market value as well as any construction and maintenance damages and if any land is taken out of production due to tower placement, tower compensation will also occur.
4	The landowners asked how far apart are the towers placed?	The Manitoba Hydro representative replied that towers are 400-500 meters apart on average.

Record of Meeting - Manitoba Minnesota Transmission Line- Round 3

General Information

Title	Maple Leaf Foods Round 3 Meeting
Community / Participant	<u>Maple Leaf Foods</u>
Round	<u>Round 3</u>
Date of Meeting	Thursday, April 09, 2015
Location	Maple Leaf Office in Landmark
In Attendance	Maple Leaf (2), Manitoba Hydro (1), AECOM (1)
Recorded by	AECOM

Meeting Description

Meeting to discuss project and biosecurity concerns of Maple Leaf Foods. Information packages and E-sized maps were provided.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	A Maple Leaf representative identified a number of hog barns in the general area of the Preferred Route.	The Manitoba Hydro representative recorded the locations and general descriptions of the identified hog barns on a large map.
2	A Maple Leaf representative informed Manitoba Hydro of the high density of hog farms in the area and that the density of the hog farms is even greater further west (approximately 5 miles west), near Seine River Sows. Maple Leaf operates 183 hog farms in Manitoba, the majority of which are in this general region of the province.	The Manitoba Hydro representative noted the information provided by Maple Leaf and requested a map file that indicates all the barns potentially in the Project Area.
3	A Maple Leaf representative identified the two hog barns near the Watson P Davidson WMA as being very sensitive and critical to the overall Maple Leaf operations. These sites are their nucleus genetic stock and have a high biosecurity risk and protection program. The Preferred Route runs between the two hog farms. Maple Leaf is very concerned with the risks and take great lengths (often exceed industry standards) to protect the stocks at these two barns. Maple Leaf was particularly concerned with the increased risk during construction and maintenance. Vehicles and personnel could inadvertently carry viruses from barns to the north to these sensitive barns.	The Manitoba Hydro representative provided Maple Leaf biosecurity training materials and contact information for Manitoba Hydro biosecurity lead (Fiona Scurrah).
4	A Maple Leaf representative asked if Manitoba Hydro would have a biosecurity representative throughout construction and after construction?	The Manitoba Hydro representative responded that Manitoba Hydro will follow Maple Leaf's biosecurity plan if more stringent than Manitoba Hydro's biosecurity plan. Manitoba Hydro would also maintain communication throughout the process. There could also be biosecurity staff on hire by contractors.

5	A Maple Leaf representative indicated that the road one mile south of the barns is used for transporting product to/from the sensitive barns. Traffic is restricted between the two barns to mitigate risk of virus transfers from barns to the north (their barns are the southerly-most barns in the area). They are concerned about traffic and construction equipment using this and other roads, with increased risk of viral transfers among barns.	The Manitoba Hydro representative recorded the concerns.
6	A Maple Leaf representative suggested winter construction and asked if there were restrictions for timing.	The Manitoba Hydro representative responded that winter is usually a target for construction, based on experience and feedback from other stakeholders in the area.
7	A Maple Leaf representative asked how many lines would be within the ROW and what kinds of towers would be installed. The Maple Leaf representative expressed a preference for self-supporting structures.	The Manitoba Hydro representative responded that there would be just one line in the ROW and showed the two potential types of structures; guyed and self-supporting using illustrations in the PowerPoint presentation that Manitoba Hydro passed around.
8	A Maple Leaf representative asked why the Preferred Route is not further east through Crown lands.	The Manitoba Hydro representative explained that there are many reasons the Preferred Route was selected including, presence of intact ecological and protected areas, concerns raised by First Nations and proximity to the existing 500 kV export line further east of the preferred route.
9	A Maple Leaf representative asked what the minimum distance required between transmission lines used for the same purpose is needed for reliability? Is it within meters or miles?	The Manitoba Hydro representative replied that the distance would be numerous miles but was not sure on a specific minimum required distance regarding proximity to D602F in the eastern portions of the project corridor.
10	A Maple Leaf representative asked why the transmission line is going through the Southern Loop, not over the north side of Winnipeg.	The Manitoba Hydro representative responded that there are currently numerous transmission lines on the north side. Manitoba Hydro would like to build on the south side of Winnipeg to create a loop around Winnipeg between Dorsey and Riel converter stations to improve reliability.
11	A Maple Leaf representative asked whom does Manitoba Hydro apply to for their environmental license.	The Manitoba Hydro representative explained that the Manitoba-Minnesota Transmission Project would require both provincial (Manitoba Conservation and Water Stewardship) and Federal (National Energy Board) review before they receive the environmental license. The regulatory review process may also include a Clean Environment Commission hearing. The decision could either be (1) no license, (2) license, or (3) license but with conditions. For example, Bipole III had 50+ conditions with the license, which meant more work for Manitoba Hydro to ensure those conditions were met before construction.
12	A Maple Leaf representative informed Manitoba Hydro that the land used for the two sensitive hog farms is leased from someone. Reaching the family can be difficult, often through lawyers. Property owners to the north were identified.	The Manitoba Hydro representative thanked Maple Leaf for the land ownership information.

13	A Maple Leaf representative suggested a route modification to avoid the jog to the east, which occurs just north of the hog barns (Map 16) and go straight south to Hwy 12 (Map 18). The route modification would avoid going in between the two barns and through largely unproductive, non-agricultural land.	The Manitoba Hydro representative noted the route modification on the map.
14	A Maple Leaf representative asked how long construction adjacent to their site would take. They requested to be kept informed about schedules in advance and throughout the construction period (as well as during any maintenance activities). Could Manitoba Hydro calculate construction days per mile?	The Manitoba Hydro representative responded that the schedule depends on the terrain, towers, easement agreements, and other factors so it's difficult to estimate schedule at this time. However, it would be a fairly short time frame.
15	A Maple Leaf representative asked if the line would affect productivity (e.g., EMF).	The Manitoba Hydro representative responded that all structures follow strict design standards for safety. The exposure levels of the line were discussed and how EMF dissipates quickly with distance. Magnetic field levels were compared to other household items.
16	A Maple Leaf representative asked if the line would interfere with wireless internet or communications.	The Manitoba Hydro representative responded that the line would not affect these services.
	A Maple Leaf representative asked if structures could be built near the line and what restrictions applied to the types of structures that could be built.	The Manitoba Hydro representative explained that structure are not permitted within the ROW but there are no restrictions outside of the ROW in terms of types of structures.
18	A Maple Leaf representative asked if their concerns were similar or aligned with those raised by Hylife (and other hog farmers).	The Manitoba Hydro representative indicated that biosecurity, timing of construction/maintenance, tower type and proximity to their calving ridge were concerns raised by Hylife.
19	A Maple Leaf representative asked that the representative be added to the email notification list.	The Manitoba Hydro representative will add the Maple Leaf representative to the mail list.
Action Items		
Add representative's email to eCampaign		

Record of Meeting - Manitoba Minnesota Transmission Project - Round 3		
General Information		
Title	Manitoba Conservation and Water Stewardship Round 3 Meeting	
Community / Participant	<u>Manitoba Conservation and Water Stewardship</u>	
Round	<u>Round 3</u>	
Date of Meeting	Friday, February 13, 2015	
Location	200 Salteaux Cres.	
In Attendance	Manitoba Conservation and Water Stewardship (8), Manitoba Hydro: (2)	
Recorded by	Manitoba Hydro	
Meeting Description		
Meeting with Manitoba Conservation and Water Stewardship regarding the preferred route. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	A Manitoba Conservation and Water Stewardship representative asked about expansions to the associated stations for the Manitoba – Minnesota Transmission Project.	The Manitoba Hydro representative explained that The Dorsey Converter Station site will be expanded to the west on Manitoba Hydro owned property to accommodate station modifications. All modifications at the Riel Converter station are contained in the current fenced area. The Glenboro South Station fence line will be expanded east on Manitoba Hydro owned property to accommodate the additional of two phase shifting transformers.
2	A Manitoba Conservation and Water Stewardship representative asked why Manitoba Hydro uses guyed towers.	The Manitoba Hydro representative replied that self supporting towers are used in cultivated agricultural areas to reduce the footprint on the landscape. Guyed towers are less expensive and used in most other terrain for the project.
3	A Manitoba Conservation and Water Stewardship representative asked about the width of the right-of-way.	The Manitoba Hydro representative replied that right-of-way width is 80-meters for self supporting towers and 100-meters for guyed towers.
4		The Manitoba Hydro representative asked what are the exact distances to Watson P. Davidson WMA and the proposed ecological reserve.
5	A Manitoba Conservation Water Stewardship representative asked about the cost of bird diverters.	
6	A Manitoba Conservation and Water Stewardship representative expressed concerns regarding mitigation for route. Regardless of where line goes, Manitoba Conservation and Water Stewardship would like more info on mitigation.	The Manitoba Hydro representative noted the request.
7	A Manitoba Conservation and Water Stewardship representative discussed the species at risk in the St. Genevieve area, protecting the Hugo wetland and the Ste. Anne Bog.	The Manitoba Hydro representative noted the sensitive site information.

	A Manitoba Conservation and Water Stewardship representative explained that Manitoba Hydro needs to ensure that clearing activities do not alter local hydrology.	The Manitoba Hydro representative noted the concerned and noted that hydrological resources are assessed in the Environmental Assessment.
9	A Manitoba Conservation and Water Stewardship representative expressed concerns about bird collisions with the skywire, specifically sand hill cranes.	The Manitoba Hydro representative explained that bird diverters will be used in areas with a high potential for bird strikes. Bird mortality field surveys were conducted for the environmental assessment along a similar sized transmission line in the area.
10	A Manitoba Conservation and Water Stewardship representative explained that from a Parks perspective, there are no concerns with the current route for the Manitoba – Minnesota Transmission Project. If the proposed ecological reserve gains approval, Manitoba Hydro will require an additional permit. Approval is anticipated this summer for the proposed ecological reserve.	The Manitoba Hydro representative noted the potential for an additional permit.
11	The Manitoba Conservation and Water Stewardship wetland habitat specialist, Cam Meuckon, indicated he had no concerns with the current route. Manitoba Conservation and Water Stewardship would have had concerns if the line was routed through the Vita area.	The Manitoba Hydro representative notes the wetland habitat specialist's comments.
12	The Manitoba Conservation and Water Stewardship representative explained that they are happy with route selection. The 207 segment is in an area that includes an ecologically important transition zone that they want protected. Manitoba Conservation and Water Stewardship will try to help Manitoba Hydro find more information to support this route.	The Manitoba Hydro representative noted the comment.
13		The Manitoba Hydro representative proposed a meeting sometime between March 11 and 13, 2015 with the biophysical team presenting. Due to the interest in mitigation, a large amount of time should be set aside to chat about mitigation.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Pineland Colony Round 3 Meeting	
Community / Participant	<u>Landowner</u>	
Round	<u>Round 3</u>	
Date of Meeting	Monday, February 23, 2015	
Location	Pineland Colony	
In Attendance	Pineland Colony representative (1), Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description		
Meeting with the Pineland Colony. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The Pineland Colony representative would prefer to not split the ROW with the adjacent landowner. The colony would prefer to have the ROW completely on their property. This would also assist the adjacent landowner as their parcel is much smaller and would therefore have a bigger impact on their operation.	The Manitoba Hydro representative noted the routing preference.
2	The Pineland Colony representative explained that the route modification would also assist with drainage plans for the colony.	The Manitoba Hydro representative indicated they will take this suggested route modification back and take a closer look at the potential impacts; however, at first glance this appears to be a reasonable request.
3		The Manitoba Hydro representative reviewed the compensation brochure with the Pineland Colony representative.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3

General Information

Title	RM of La Broquerie Round 3 Meeting
Community / Participant	<u>RM of La Broquerie</u>
Round	<u>Round 3</u>
Date of Meeting	Wednesday, February 11, 2015
Location	La Broquerie Municipal Office
In Attendance	RM of La Broquerie Reeve and Council, Manitoba Hydro (4)
Recorded by	Manitoba Hydro

Meeting Description

Round 3 MMTP meeting with the RM of La Broquerie. Information packages and E-sized project maps were provided.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The RM Council asked how did Manitoba Hydro inform people affected by the project in the RM of La Broquerie?	The Manitoba Hydro explained the first discussions and advertising the project with the public began in the fall of 2013. Advertising through local and regional newspapers, radio stations, addressed letters, posters in the communities and large mail outs of postcards occurred during Rounds 1, 2, and 3 of the public engagement process. Throughout the process Manitoba Hydro has hosted numerous open houses in communities in the region as well as numerous stakeholder group meetings. When Manitoba Hydro presented the preferred route to the public all affected landowners received a letter via express post which they needed to sign for to indicate they had in fact received the letter. As well all landowners within a mile of the preferred route also received a letter via mail informing them of the preferred route. Manitoba Hydro also has a 1-800 number, an email address and website for the project which have been widely advertised for further project information.
2	The RM Council feels that the research they have undertaken regarding health effects from EMF are significant within a mile of a transmission line. Council feels the transmission line should not be routed within close proximity to La Broquerie.	The Manitoba Hydro representative noted the concern.
3	The RM Council also feels the preferred route will stunt the growth of the community as they feel many people will not want to live near a transmission line.	The Manitoba Hydro representative noted the concern.
4	The RM Council commented that the NDP Government feels there is a need for this line as they continue to overspend and this unfairly impacts the community.	The Manitoba Hydro representative noted the concern.

5	The RM Council indicated there was no public support for segment 207 and cannot believe Manitoba Hydro would go against the clear direction of the community and not route the transmission line on the east side of the Watson P. Davidson Wildlife Management Area. What are the odds of changing this route?	The Manitoba Hydro representative indicated they are still open to hearing feedback and considerations not previously heard from the community. At this stage if there is something we have missed in the routing process we would take that into consideration when moving forward.
6	The RM Council commented that all people in the RM are against this route. How can Manitoba Hydro say this is the preferred route?	The Manitoba Hydro representative explained that the routing process balances numerous perspectives. The human environment is one perspective and Manitoba Hydro needs to take all perspectives into consideration.
7	The RM Council asked how can Manitoba Hydro say that property values will not be affected by a transmission line running through this community?	The Manitoba Hydro representative explained that the transmission line is not routed over homes. This being said there are many transmission lines throughout the province of Manitoba that run through very vibrant and growing communities. East St. Paul, Sage Creek and Waverly West are examples of communities that are vibrant and growing despite the presence of transmission lines in their communities. It was also explained that zoning and subdivisions were taken into consideration during our routing process.
8	The RM Council feels that Manitoba Hydro is placing a higher value on wildlife than they are people.	The Manitoba Hydro representative explained that is not the case; the value of community is placed at 30% when considering routing of the transmission line while the value of natural environment is placed at 7.5%.
9	The RM Council indicated they have concern regarding the cost of the project and the increases it will add to rates for Manitoba rate payers?	The Manitoba Hydro representative indicated that the project was approved by the Public Utilities Board through the Needs For and Alternatives To review in which Manitoba Hydro proposed alternative ways to move forward with Manitoba Hydro's long term development plan.
10	The RM Council asked why is Manitoba Hydro using power from the northern dams to send power to the USA. Wouldn't it be more cost effective to send power from the southern dams to the US?	The Manitoba Hydro representative explained the long term resource development plan. In this plan 70% of all hydro electricity generated in Manitoba comes from our northern dams. The dams Manitoba Hydro currently has on the Winnipeg River system are long life assets that assist with the Manitoba Hydro system. The water that goes through dams from the Winnipeg River then travels to Lake Winnipeg and the Nelson River and is used again by our northern dams to create more electricity. Manitoba Hydro is in the business of renewable energy and will harness power from the resource, which is water, more than once. Manitoba Hydro also sells the excess energy from the dams that is not needed by Manitobans on a day to day basis. Instead of spilling water over the dam and not making money from the excess spill, Manitoba Hydro will sell that energy on the market for a profit and this is also water that has been harnessed more than once in the Manitoba Hydro system.

11	The RM Council indicated they want to see the route moved to segment 207 and a guarantee that Manitobans rates will not increase.	The Manitoba Hydro representative indicated that we have an aging system that needs to be upgraded to keep up with an increasing demand of power from Manitobans. We exist to supply power to Manitobans and we need to keep up with this demand.
12	The RM Council asked if 200 people show up at the open house, will that be enough to change the route? Will it change anything?	The Manitoba Hydro representative explained that all feedback received through the public engagement process will be taken into consideration, including all proposed modifications. The type of feedback Manitoba Hydro hopes to gain from the open house process includes information on land use, constructive conversation and dialogue; we are interested in learning in more detail about what is going on the landscape as well as having discussions regarding the potential options for routing this line. The Land Owner Information Centers will occur all next week in La Broquerie for these detailed discussions to occur. General public dialogue will also be recorded at this time as well.
	The RM Council explained that La Broquerie is the majority stakeholder in this project and everyone in this RM is against the project. Why wouldn't Manitoba Hydro make this change?	The Manitoba Hydro representative replied that a routing process is used that balances all perspectives and while the community perspective does have a high value it is not the only perspective taken into consideration when routing a transmission line. If there is something that is brought to Manitoba Hydro's attention that was not considered in the previous two rounds, Manitoba Hydro would take any new information into consideration.
14	The RM Council indicated that the RM of La Broquerie has a petition with over 300 signatures and we will continue to work on it. We will continue to work against this project and the routing through the RM.	The Manitoba Hydro representative replied they understand the concerns and is here to provide information regarding the project.
15	The RM Council asked how far along is Minnesota Power in the approvals process for their side of the project?	The Manitoba Hydro representative replied that the US approvals and regulatory process is well underway and is in a very similar stage to Manitoba Hydro for the project timeline.
16	The RM Council has the impression that all weightings are equal and we strongly believe humans should have a significantly greater value.	The Manitoba Hydro representative indicated that in the criteria used for decision making Proximity to Residences takes up the largest weighting. Further comparison is undertaken prior to determining a subset of routes or a preferred route. Comparative values include cost at 40%, community at 30%, and the environmental considerations are 7.5%.
17	The RM Council mentioned it seems that Manitoba Hydro is using compensation as a tool for approval during one on one conversations.	The Manitoba Hydro representative explained that land use is a priority for the discussions, however, if a land owner asks about compensation we will certainly provide them with as much information as possible, so they too can make informed decisions.

18	The RM Council requested detailed information on why and how the eastern route was eliminated.	Manitoba Hydro indicated that they would come back to meet with the RM again and can have a lengthy discussion around the routing process and the reasons the preferred route is the way it is. A meeting was set up and under taken on February 23, 2015.
----	--	--

Record of Meeting - Manitoba Minnesota Transmission Project - Round 3

General Information

Title Piney and Stuartburn Meeting with RM of Stuartburn & RM of Piney

Community / Participant RM of Piney

Round Round 3

Date of Meeting Monday, March 09, 2015

Location Stuartburn Municipal Office

In Attendance RM of Stuartburn (1), RM of Piney (1), Manitoba Hydro (2)

Recorded by Manitoba Hydro

Meeting Description

Meeting was arranged to discuss the optic cable that will be travelling with the Manitoba- Minnesota Transmission Project.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The Rural Municipality representatives municipalities would like to continue coordination and understanding between the municipality, Manitoba Hydro and the telecom industry.	The Manitoba Hydro representative took note of the interest. The role Manitoba Hydro has played with optic cables in the province was discussed and examples of previous projects were given.
2		The Manitoba Hydro representative explained that the sky wire is used for lightning protection on the towers. Within the wire there will be optical fiber that will be spliced at 3-5km intervals which provides an opportunity to connect in. Manitoba Hydro will also see where there is interest amongst its own infrastructure such as existing stations.
3		The Manitoba Hydro representative explained the role of Manitoba Hydro Telecom which is to leverage and sell bandwidth. Examples have included existing wireless companies in rural Manitoba, school divisions and health authorities.
4		The Manitoba Hydro representative explained that this cable would not be available for use until construction of the transmission line that is anticipated to be in-service by 2020 depending on construction timelines and regulatory approval.
5		The Manitoba Hydro representative explained the difference between HSPA and LTE. The Manitoba Hydro representative also outlined that for HSPA from Zhoda to Piney you would typically require 25Mb/s for HSPA and 1Gb/s for LTE which can easily be obtained through the fiber optic network
6		The Manitoba Hydro representative noted that MTS would be the preference for carrier in the area as others such as Telus have remained close to major highways such as PTH 1 & PTH 75 and wouldn't provide seamless coverage for the residents.
		The Manitoba Hydro representative noted that Manitoba Hydro is willing to work with providers if the project is to go forward. It was discussed that discussions with MTS would need to be undertaken as negotiations tend to be on a facility swap kilometer by kilometer basis although a "lit" service option is also available at the discretion of the customer. The Manitoba Hydro representative explained that Manitoba Hydro has a rich history of working with MTS and used the example of the 22 microwave sites that are shared in the Interlake region along PTH 6.
8	The Reeve of Piney asked a question regarding the number of structures needed to support coverage in the area.	The Manitoba Hydro representative replied that the coverage would be dependent on terrain. On average a 300ft tower will cover 30 mile diameter. It was discussed that there are existing MH towers at Woodridge and Whitemouth Lake and there could be the possibility of co-location with either of the towers should a carrier see them as desirable locations.

9	The Rural Municipalities discussed the replacement of Fleetnet in the area and that three new towers would be going in around Steinbach, Vita and Buffalo Point to support that initiative and that they may be useful for a cellular deployment.	
10	The Reeve of Stuartburn commented that they have been told in the past that a new site could cost upwards of one million dollars.	The Manitoba Hydro representative confirmed that based on his experience that is a realistic number.
11		The Manitoba Hydro representative indicated that they are favorable in undertaking this endeavor if the project is moving forward. It was noted that there is no issue with planning early regarding potential splicing sites.
12		The Manitoba Hydro representative noted that most skywires would carry 36-48 fibers whereas Manitoba Hydro would potentially use four initially.
13	The Reeve of Piney indicated that there are 1600 people in the RM and many are using US carriers. There is a strong push from subscribers in both municipalities to increase coverage.	
14	The Reeve of Stuartburn asked to have a letter drafted from Manitoba Hydro indicating that they are willing to discuss the potential and work with other telecom agencies. They would also like the note to indicate they have the ability to offer services.	

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	MMTP Round 3 Meeting with the RM of Tache	
Community /	<u>RM of Tache</u> Participant	
Round	<u>Round 3</u>	
Date of Meeting	Tuesday, February 10, 2015	
Location	Tache Municipal Building	
In Attendance	RM of Tache: 7 council members, CAO and Assistant CAO, Manitoba Hydro (3)	
Recorded by	Manitoba Hydro	
Meeting Description		
Manitoba Hydro staff provided council with the following materials:		
<ul style="list-style-type: none"> - Presentation - Round 3 Newsletter - Route Selection Brochure - Alternating Current Brochure - Compensation Brochure - VC Handouts: Environmental Assessment and Regulatory Process, Land Use and Property and Residential Development 		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	A council member asked how far the transmission towers will be apart from one another.	The Manitoba Hydro representative replied that the average span of the towers would be 3.4 towers per mile or 450m.
2	A council member asked what the maximum allowable sag of a transmission line is.	The Manitoba Hydro representative replied that the transmission line would be designed to applicable CSA standards.
3	A council member asked why a route was not deemed preferred that crosses further east in the RM over by the community of Ross.	The Manitoba Hydro representative explained the routing preference provided by council, as well as local landowners, was to travel further east in the RM. It was carried forward from 550,000 routing options to the final 5. This route was considered but did not balance the engineering, human and natural environments as well as the preferred route currently being presented.
4	A council member wished to know the difference between utilizing crown lands as opposed to private.	The Manitoba Hydro representative explained that 42% of the transmission line is located on private lands and the remainder on crown lands.
5	A council member engaged in a discussion regarding what evaluative routing options were undertaken.	The Manitoba Hydro representative explained that in the Ste. Genevieve area, many route segments were considered in the attempt to minimize project impacts to the local environment including people. Route segments are developed based on feedback provided by the environmental assessment team as well as the public.
6	A council member commented that the notification undertaken for this round of engagement was well done.	The Manitoba Hydro representative outlined that various methods were used to inform the public and those potentially affected.
7	A council member asked why Manitoba Hydro notified a mile on both sides of the transmission line.	The Manitoba Hydro representative explained that at this stage in routing, the route is not final and slight modifications would be considered by the project team. A mile was also used to inform those in proximity to the transmission line of the Project and to answer questions that they may have about Manitoba Hydro activities in their area.
8	A council member wanted it noted that they believe Manitoba Hydro is not listening to the people as there is a strong desire for the route to run farther east in the municipality. "Manitoba Hydro will route where they want to route and that people are not important in decision making. "	The Manitoba Hydro representative took note of this.

9	A council member asked if humans or computers determine the preferred route.	The Manitoba Hydro representative explained that the criteria used to evaluate the 550,000 options was developed by stakeholders and Manitoba Hydro but a computer assisted in scaling the number of options to one that balanced the various perspectives.
10	A council member asked as to why there needs to be separation between this transmission line and the existing 500kV export line (D602F).	The Manitoba Hydro representative explained that greater separation reduces the risk of one event taking both lines out of service simultaneously. It was also explained that consideration of weather data and risk of severe weather is part of the environmental assessment process. It was also noted that there is a higher risk when infrastructure is paralleling in a north/south manner as weather in this part of the Province tends to travel east/west.
11	A council member wanted to know the difference between the public engagement events being held in Ste. Anne.	The Manitoba Hydro representative replied that the Open House was open to all members of the public and would be staffed with more Project Team representatives. The other dates (W/TH/S) are intended for landowners within one mile and would allow for one-on-one discussions.
12	A council member indicated that as with Bipole III there should be a benefit to the municipality such as the Community Development Initiative for this Project.	The Manitoba Hydro representative replied that no commitments have been made to date regarding a Community Development Initiative such as the one provided for Bipole III.
13	A council member requested that Manitoba Hydro return on February 20th at 9:30am to discuss the RM's quarry holdings.	The Manitoba Hydro representative took note of the request.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Manitoba Heritage Resources Branch Round 3 Meeting	
Community	Manitoba Heritage Resources Branch	
Round	<u>Round 3</u>	
Date of Meeting	Tuesday, February 10, 2015	
Location	Manitoba Hydro 820 Taylor Ave Office	
In Attendance	Heritage Resources Branch (2), Manitoba Hydro (1), Stantec (1)	
Recorded by	Stantec	
Meeting Description		
The meeting began with an overview of the Project schedule, tower design, environmental assessment process, the preliminary preferred route and the existing transmission corridor. A heritage resources presentation was delivered by Stantec Consulting Ltd. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The Heritage Resources Branch representatives expressed interest in Manitoba Hydro's heritage assessment for the Project.	The Stantec representative presented the heritage resources existing environment, predictive modeling exercise and the heritage resources impact assessment that had been completed in September/October 2014.
2	The Heritage Resources Branch representatives asked about the role of Traditional Knowledge in the Manitoba- Minnesota Transmission Project.	The Manitoba Hydro representative explained the overall role of Traditional Knowledge in Project's environmental assessment process as well as the specific contributions to the heritage resources component.
3	The Heritage Resources Branch discussed the cut-off date for archaeological sites and the most recent time period recognized by the Province. It was indicated that a site dating A.D. 1945 was the most recent time period that would be recognized.	The Manitoba Hydro representative noted the cut-off date for archeological sites.
4	The Heritage Resources Branch discussed the cumulative effects on heritage resources in the Project area.	The Manitoba Hydro representative indicated that heritage resources would be included in the cumulative effects assessment, along with all other Valued Components.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3

General Information

Title Manitoba Agriculture, Food and Rural Development (MAFRD) Round 3 Meeting

Community / Participant Manitoba Agriculture, Food and Rural Development

Round Round 3

Date of Meeting Tuesday, March 17, 2015

Location Manitoba Hydro 820 Taylor Ave Office

In Attendance MAFRD (2), Manitoba Hydro (1), Stantec (1)

Recorded by Stantec

Meeting Description

The meeting began with a the Round 3 Preferred Route presentation, followed by the overview of Environmental Assessment for Agriculture presentation. Information packages and E-sized maps were provided.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The MAFRD representatives indicated they are now conducting clubroot sampling programs in agro-Manitoba.	The Manitoba Hydro representative indicated that the biosecurity policy would be implemented for the project.
2	The MAFRD representatives indicated they are interested in seeing the agricultural productivity information being developed by Stantec once it's complete.	The Manitoba Hydro representative indicated the agricultural productivity information will be included in the Environmental Impact Statement and available to the public once submitted to regulators.
3	The MAFRD representatives asked if Manitoba Hydro would be assessing shelterbelt.	The Manitoba Hydro representative explained that shelterbelts are being assess under the Land and Resource Use valued component.
4	The MAFRD representatives provided a list of questions on the agricultural assessment in advance of the meeting.	The Manitoba Hydro representative addressed the list of questions in addition to providing a project status update.
5	Can MB Hydro provide a listing of the total number of farmers affected under this project?	
6	Have the tower design and footprint been determined in order to identify the total area of land affected by the project? Can you provide the acreage expected to be expropriated under the project?	
7	What mitigation measures will be used to minimize impacts to agricultural land, particularly prime agricultural land that is actively farmed (examples of impacts to be mitigated: damage to fields during construction – ruts, compaction, damage to crops;	
8	What biosecurity protocols are required during construction and maintenance to minimize soil movement from field to field as well as risk of disease pathogen & weed seed spread? What measures are in place to ensure protocols are being followed by MB Hydro employees as well as contractors? Who is responsible for ensuring protocols are being followed?	
9	Where trees exist on agricultural crop or grazing land, how will they be removed and disposed of to ensure future agricultural use of the land, particularly within the transmission line right of way? With respect to grazing and pasture lands, what remediation measures will be taken to ensure lands are re-vegetated with forage species palatable to livestock?	
10	How is compensation to land-owners determined? Were land-owners involved in this determination or is there the opportunity to negotiate compensation? With respect to compensation for farmland, have additional costs associated with farming around towers been factored in? (examples: additional fuel costs associated with driving around towers, additional cost associated with weed management under the tower, loss of revenues from land removed from production under the tower footprint). Again, what is the total number of farmers affected?	
11	Does the proposed Manitoba-Minnesota Transmission project route overlap BiPole III? Will it affect the same people or the same farming operations?	
12	Are there livestock operations that may be impacted by the route? Have the impacts on manure application activities been considered and measures been taken to minimize impacts? (The footprint of the tower will remove land from the land base available to receive manure; this may have implications for livestock producers that are currently required to file annual manure management plans with the department of Conservation and Water Stewardship.)	
13	Has MB Hydro been in contact with the Canadian Association of Energy and Pipeline Landowners Association (CAEPLA) in regards to this project? Are there plans to?	
	Has MB Hydro been in contact with the Canadian Aerial Applicators Association in regards to this project to identify aerial application companies who may be impacted? Are there plans to?	
	What are the timelines from establishing the route, to negotiating land deals with affected landowners to finally moving to expropriation of land under the Expropriation legislation?	

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3

General Information

Title	Landowner Round 3 Meeting
Community / Participant	Landowner
Round	Round 3
Date of Meeting	Tuesday, March 12, 2015
Location	Manitoba Hydro 820 Taylor Ave Office
In Attendance	Landowner (1), Manitoba Hydro (2)
Recorded by	Manitoba Hydro

Meeting Description

Landowner requested a meeting with Manitoba Hydro representatives to discuss the current alignment of the MMTP project across her property in relation to the existing R49R transmission line. Information packages and E-sized maps were provided.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The landowner wanted it documented that the current alignment (east of R49R) would be more detrimental to her property and an alignment located on the western side of R49R would be much preferred.	The Manitoba Hydro representative noted the routing preference.
2	The landowner was asked how many acres she owned. It was estimated based on the information provided by hardcopy it would be approximately 80 acres, however the landowner will confirm the acres.	The Manitoba Hydro representative noted the comment.
3	The landowner asked why the eastern side of R49R was not presented earlier in the process.	The Manitoba Hydro representative explained that during Round 2 there were other routing options that existed west of the existing transmission line. During route evaluation and consideration of the natural, human and technical perspectives, the western options were eliminated. Due to this the alignment was shifted to the eastern side of R49R.
4	The landowner asked as to what criteria would limit the alignment from being located on the western side.	The Manitoba Hydro representative indicated that there are technical concerns with crossing an existing transmission line from reliability of electrical supply, to risk to the surrounding community as well as larger structures and design considerations. With the alignment that was brought forward as a preferred route, avoiding crossing R49R was deemed much more preferred from a technical and risk perspective.
5	The landowner provided a write up regarding her feelings and use of the land and how this transmission line would impact her use and enjoyment of the property.	The Manitoba Hydro representative reviewed the document and noted that the file would be submitted as part of the public engagement technical report that would be filed with the Environmental Impact Statement.
6	The landowner requested that she would like to make modifications and review her letter and will submit to Trevor Joyal by email.	The Manitoba Hydro representative noted the comment.
7	The landowner requested that Manitoba Hydro outlines the next steps in the overall process.	
		The Manitoba Hydro representative outlined the route finalization process, compilation and development of the environmental impact statement, filing with Manitoba Conservation and Water Stewardship and the National Energy Board and the associated public review processes that will be undertaken outside of Manitoba Hydro. It was also noted that Manitoba Hydro will notify individuals when the EIS is filed, or when new information becomes available.
8	The landowner asked how the acquisition or refusal process is undertaken.	The Manitoba Hydro representative outlined that it is Manitoba Hydro's desire to negotiate and come to an agreement with each landowner along any transmission line route. Easement payments are for 150% of market value. If refused, Manitoba Hydro has the authority to expropriate under The Manitoba Hydro Act and would likely expropriate for purchase and not for easement. It was also noted that if the land is zoned agricultural, there would be a tower payment.
9	The landowner asked when the acquisition process would begin.	The Manitoba Hydro representative explained that the process would likely begin following a licence decision on the project. At that time MH reps would approach each affected landowner and begin compensation discussions. It was noted that individual interests, such as access or firewood, would also be discussed at that time.
10	The landowner asked whether having a lawyer at this time would be beneficial to her.	The Manitoba Hydro representative replied that if she would like to consult with a lawyer it would be at her discretion. At this time, the information that she has provided will be put forward in the route finalization process for consideration.
11	The landowner asked where her efforts should be focused to oppose the current preferred route.	
		The Manitoba Hydro representative explained that the landowner has provided information throughout the environmental assessment and route determination processes. This information has been documented and will be considered during route finalization. It was also outlined that the public review process by Manitoba Conservation and Water Stewardship and the National Energy Board will also accept public feedback in their licensing decisions. The Manitoba Hydro representative also outlined the possible Clean Environment Commission hearings that she could become involved in.
12	The landowner asked what other concerns exist in the area surrounding her home.	The Manitoba Hydro representative replied that landowners have different concerns depending on future plans, development or where the preferred route is located on their property. Concerns regarding subdivisions, proximity to residences as well as quarry concerns have been raised in her community.
13	The landowner requested a measurement from her home to the center line and the edge of the right-of-way.	The Manitoba Hydro representative provided the landowner with the requested measurements. It was noted that the landowner's house was approximately 173m to center line and 133m to edge of right-of-way.
14	The landowner asked for the estimated decibels the line would produce.	The Manitoba Hydro representative explained that audible noise modeling is being undertaken and will be provided in the EIS. At the distance the home is located and surrounding tree cover, there is low likelihood the landowner would be able to hear the line. It was suggested that the landowner visit M602F to get a feeling of the noise generated from an existing 500kV line.
15	The landowner asked about estimated electric and magnetic fields that the line would produce.	The Manitoba Hydro representative indicated that this transmission line will be built to safety standards set forth by international agencies (ICNIRP). The Manitoba Hydro representative shared the estimated magnetic field levels handout and outlined exposure at various distances and safe guidelines.
16	The landowner wanted it noted that there is a human component to the effects it is having on her and other residences and we should not rely only on data to make decisions.	The Manitoba Hydro representative noted the comment.
17	The landowner asked whether a government change would end the project.	The Manitoba Hydro representative noted that no political party has had an influence on the location of the transmission line. It was outlined that the landowner could approach her local representatives to discuss her concerns.

**Rural
Municipality of
Municipalité
Rurale de**



TACHÉ

Box/C.P. 100
Lorette, Manitoba R0A 0Y0

Office of the Chief Administrative Officer
Bureau du Directeur Générale

Tel.: 878-3321
Fax: 878-9977
E-mail: info@rmtache.ca

February 19th, 2015

**Manitoba Hydro Manitoba-Minnesota Transmission Project
c/o Licensing & Environmental Assessment Department
P.O. Box 7950, STN Main
Winnipeg, Manitoba
R3C 0J1**

Dear Sir/Madame;

Council at their regular scheduled meeting of February 10th passed resolutions 142-2015 & 143-2015 which are intended to express the Municipalities' strong objection to the identification of a preferred route for the Manitoba- Minnesota Transmission Line which will result in significant permanent negative impacts to the Municipality and our residents that live in proximity to the preferred route.

Earlier routing options that were under consideration to areas east of the Municipality that would have utilized undeveloped land were dropped from consideration even after the public engagement that was received by Manitoba Hydro confirmed it as a preference by the Municipality and members of the public.

The Municipality has passed the attached resolutions as a result of those decisions by Manitoba Hydro.

PER: [Signature]
**Dan Poersch
Chief Administrative Officer**

THE RURAL MUNICIPALITY OF TACHÉ
Lorette, Manitoba.

COPY OF A RESOLUTION

Moved By Councillor: Heather

Seconded By Councillor: Rivard

**MB-MINNESOTA TRANSMISSION PROJECT –
PREFERRED ROUTE SELECTION**

142-2015

Whereas the Municipality fervently objects to the current preferred route selected by Manitoba Hydro for the Manitoba-Minnesota Transmission Project; and

Whereas public engagement has proven to be a biased proponent oriented solution avoiding meaningful consultation;

Resolved that correspondence be forwarded to MB. Hydro outlining the Municipality's various reasons for the opposition, and to request re-evaluation of the route.

Carried.

I, Daniel Poersch, Chief Administrative Officer of The Rural Municipality of Taché, do hereby certify that the above is a true and correct copy of resolution numbered 142-2015 duly passed by the Council for The Rural Municipality of Taché in session assembled at the Council Chamber in the Village of Lorette on the 10th day of February A.D. 2015.

ABS/ J. Laramee

Chief Administrative Officer.

THE RURAL MUNICIPALITY OF TACHÉ
Lorette, Manitoba.

COPY OF A RESOLUTION

Moved By Councillor: Heather

Seconded By Councillor: Trudeau

**MB-MINNESOTA TRANSMISSION ROUTE – LAND
DEVALUATION**

143-2015

Whereas should MB Hydro adopt their current preferred route whereby it crosses through and over the eastern portion of the Municipality; and

Whereas the areas being affected consist of high value land and residences, aggregate holdings, and valuable agricultural lands; and

Whereas this would detrimentally and negatively impact land and residence values on a long term basis;

Resolved that if MB Hydro does not choose to re-direct the line further east to undeveloped lands that the identified compensation be restructured to include the true economic losses of impacted landowners and the Municipality.

Carried.

I, Daniel Poersch, Chief Administrative Officer of The Rural Municipality of Taché, do hereby certify that the above is a true and correct copy of resolution numbered 143-2015 duly passed by the Council for The Rural Municipality of Taché in session assembled at the Council Chamber in the Village of Lorette on the 10th day of February A.D. 2015.


Chief Administrative Officer.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3

Title	RM of Piney Round 3 Meeting	
Participant	RM of Piney	
Round	Round 3	
Date of Meeting	Monday, February 23, 2015	
Location	RM of Piney Municipal Office	
In Attendance	RM of Piney Reeve and Council, Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
MEETING DESCRIPTION		
A meeting was held at the Piney Municipal Office to discuss the Manitoba-Minnesota Transmission Project. Information Packages and E-sized maps were provided.		
DISCUSSION		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The RM Council indicated they are happy the line does not travel through the Sandilands, whereas they support the RM of La Broquerie in moving the line further from the community.	The Manitoba Hydro representative noted their preference.
2	The RM Council mentioned it seems strange that the natural perspective would have more value than people.	The routing process is not about one versus the other. It's about balancing perspectives and minimizing effects.
3	The RM Council asked about the concern regarding future development in La Broquerie?	The Manitoba Hydro representative explained the portion of the preferred route that is near La Broquerie is in an area that is zoned appropriately for transmission line. Manitoba Hydro avoided many subdivisions and many effects can often be mitigated through tower spotting.
4	The RM Council How will people in the RM of Piney be aware and learn about how to contact Manitoba Conservation during the 90 day public review period?	Manitoba Hydro explained they will keep the RM of Piney and all interested parties informed as we move forward with the Project.
5	The RM Council asked what happens if Manitoba Conservation says the route near La Broquerie is wrong?	The Manitoba Hydro representative replied that this would undermine the routing process undertaken and could potentially involve further work and study.
6	The RM Council asked when is the in-service date?	The Manitoba Hydro representative replied 2020.
7	The RM Council asked how often has the regulator rejected a project?	The Manitoba Hydro representative replied that there is one rejection on record, and typically what happens is that the regulator will place any number of conditions on the license before the proponent can move forward.
8	The RM Council asked how was cost taken into consideration when deciding on 207 versus 208?	The Manitoba Hydro representative replied that the cost difference is very small when comparing 207 and 208 but is considered on an entire route perspective.
9	The RM Council asked how long are the contracts for exports to Minnesota Power and Wisconsin Power for?	The Manitoba Hydro representative replied firm power sale commitment to Minnesota Power is for 250 MW between 2020 and 2035. The firm power sale commitment to Wisconsin Public Service is for 100 MW between 2021 and 2027. MMTP would allow for the contract with Wisconsin Public Service to increase to 300 MW with the construction of Conawapa.
10	The RM Council asked how was the route selected?	The Manitoba Hydro representative explained a wide range of options, comments, concerns, and preferences must be taken into consideration when routing a transmission line. The line was evaluated along with 700,000 others to determine a preferred route. Upon categorization of the top routes we considered reliability, cost, environmental, human, public input and risk to schedule. This route is not final and Manitoba Hydro will consider slight adjustments to accommodate issues and concerns. Manitoba Hydro strives to find a route that minimizes potential impacts on people and the environment. This starts with a broad study area and sequentially narrows down to preferred routes after careful analysis, consideration of public and stakeholder input, and review of issues and constraints. Routing is based on the EPRI-GTC Overhead Electrical Transmission Line Siting Methodology.

	The RM Council asked who is paying for the transmission line?	The Manitoba Hydro representative explained that Manitoba Hydro pays for the transmission line in Manitoba. Manitoba Hydro will cost share the development of the US portion of the project with other US utilities. As part of conditions of the power sale to Minnesota Power, Manitoba Hydro and Minnesota Power agree to build a transmission line. Minnesota Power only needs a 230 kV line to acquire the power they are purchasing currently. To take advantage of future opportunities for power sales Manitoba Hydro has agreed to build a larger transmission line which will require only one new right-of-way. To facilitate this opportunity Manitoba Hydro has agreed to own 49% of the US portion of the line. It is Manitoba Hydro's intention to sell off ownership of its US assets as new power purchase contracts are in place.
12	The RM Council explained that in the RM of Piney, people have no options for natural gas and currently pay a lot of money for hydro electricity. How will people who live in the RM of Piney benefit from this project?	The Manitoba Hydro representative explained that benefits will be seen by the offset of hydro rates to all Manitobans. The Public Utilities Board is responsible to reject or accept rate changes.
13	The RM Council asked if there are any other options to build the line that do not include large towers?	The Manitoba Hydro representative replied it is possible to build the line underground but it is 10 to 15 times more expensive.
14	The RM Council explained that RM of Piney holds many transmission lines for Manitoba Hydro and yet Manitoba Hydro does not pay any taxes to the RM.	The Manitoba Hydro representative confirmed that's correct. Manitoba Hydro does not pay taxes to any of the RMs with transmission lines. Manitoba Hydro will however work with RMs including concerns such as weight restrictions.
15	The RM Council asked what benefits will the RM of Piney receive?	The Manitoba Hydro representative replied that hiring local employees and contractors will be a high priority but will be temporary.
16	The RM Council expressed interest in a CDI type of initiative for MMTP as they believe the precedent has been set.	The Manitoba Hydro representative replied that no decisions have been made regarding a CDI type of initiative for MMTP as of yet.
17	The RM Council expressed interest in training and employment opportunities such as what has occurred in the north. How should the RM keep abreast of opportunities?	The Manitoba Hydro representative replied that there is a careers section on their website. Manitoba Hydro would encourage anyone looking for work to fill out a profile and visit the website regularly for opportunities. Manitoba Hydro also has a purchasing email address: purchasing@hydro.mb.ca where anyone looking for contract opportunities should use this email as a first step in making contact.
18	The RM Council asked if Manitoba Hydro has listened to Pineland Colony's requests for routing?	Manitoba Hydro representative has a meeting with the Colony right after this one to discuss routing options that reflect the colony's feedback.
19	The RM Council asked what the compensation package looks like?	The Manitoba Hydro representative replied easements are 150% of market value of the land needed for the right of way. Manitoba Hydro provides a one-time compensation payment for transmission line easements, as well as a one-time structure payment related to loss of annual crop production. Hydro also compensates landowners for any damages occurring related to construction of the line.
20	The RM Council asked if Manitoba Hydro will let the RM know what comes of the meeting with the colony? Manitoba Conservation has indicated they may turn some land adjacent to the Colony into an ecological site which would disrupt the drainage of the colonies land and cause a lot of problems. The RM does not agree with the proposed ecological site.	
ACTION ITEMS		
Notify Piney Reeve of outcome of meeting with colony.		

RESOLUTION
OF THE COUNCIL
OF THE R.M. OF PINEY

Resolution No. 412

Date: February 23, 2015

Moved by Councillor KEN PROCIW Seconded by Councillor Dale Edworthy

BE IT RESOLVED THAT the RM of Piney Council urge Manitoba Hydro to consider and respond to all of the effected municipal ratepayers concerns with regard to construction of the Manitoba Minnesota Transmission Line.

Carried:

Defeated:

Tabled:

[Signature]
Administration

[Signature]
Head of Council/Chairperson

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3

General Information

Title RM of Ritchot Round 3 Meeting

Community / Participant RM of RitchotRound Round 3

Date of Meeting Tuesday, February 03, 2015

Location Ritchot Municipal Office

In Attendance Robin Gislason, Trevor Joyal, RM of Ritchot Reeve and Council

Recorded by Manitoba Hydro

Meeting Description

Meeting with the RM of Ritchot Council. Information packages and E-sized maps were provided.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The RM Council asked if the preferred route comes through Ritchot.	The Manitoba Hydro representative replied that the preferred route passes through a small area near Highway 59.
2	The RM Council requested a map that includes both the St. Vital route as well as the MMTP preferred route in the RM of Ritchot.	The Manitoba Hydro representative indicated they would send a map to the RM. As a side, the Manitoba Hydro representative indicated that the St. Vital Transmission Complex will avoid both the lagoon and the waste management area in the RM.
3	The RM Council asked when will a licence decision regarding the St. Vital Letellier line happen.	The Manitoba Hydro representative indicated that it is anticipating a licensing decision soon and an in-service date for the project near the end of 2018.
4	The RM Council asked if MMTP is for export purposes only.	The Manitoba Hydro representative replied MMTP will be able import energy during times of emergency such as storms or droughts.
5	The RM Council asked if agricultural compensation is a onetime payment.	The Manitoba Hydro representative indicated compensation is a onetime payment.
6	The RM Council asked if the easement stay with the property if ownership changes.	The Manitoba Hydro indicated the easement stays with the property in perpetuity.
7	The RM Council asked if Bipole III construction has begun.	The Manitoba Hydro representative explained that construction has begun with clearing in the northern areas and central.
8	The RM Council asked if expropriation is common.	The Manitoba Hydro representative explained that expropriation was not common until the Bipole III project. Easement is Manitoba Hydro's preferred method of working with landowners.
9	The RM Council asked how many private landowners will potentially be affected by the MMTP preferred route.	The Manitoba Hydro representative replied that 139 private landowners are potentially affected by the preferred route.
10	How many private land owners are affected in the RM of Ritchot?	The Manitoba Hydro representative explained the MMTP preferred route is on the Floodway Authority's land in the RM of Ritchot. Therefore no private landowners are affected.
11	The RM Council asked what happens if the Provincial Government changes during this process?	The Manitoba Hydro representative will continue to move forward until otherwise notified.

Action Items

Send MMTP, Bipole III and St. Vital map to RM of Ritchot

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3

General Information

Title	RM of Ste Anne Meeting Round 3
Community	<u>RM of St. Anne</u>
Round	<u>Round 3</u>
Date of Meeting	Wednesday, February 11, 2015
Location	Ste. Anne Municipal Office
In Attendance	Reeve and Council of the RM of Ste. Anne, Manitoba Hydro (2)
Recorded by	Manitoba Hydro

Meeting Description
 A Round 3 meeting was held with the Reeve and Council for the RM of Ste Anne. Information packages and E-sized project maps were provided.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The RM Council asked how has Manitoba Hydro made information available to the public?	The Manitoba Hydro representative explained advertising for the project with the public began in the fall of 2013. Advertising through local and Winnipeg newspapers, radio stations, posters in the communities and large mail outs of postcards occurred during Rounds 1, 2, and 3 of the public engagement process. Throughout the process Manitoba Hydro has hosted numerous open houses in communities in the region as well as numerous stakeholder group meetings. When Manitoba Hydro presented the preferred route to the public all affected landowners received a letter via express post which they needed to sign for to indicate they had in fact received the letter. As well all landowners within a mile of the preferred route also received a letter via mail informing them of the preferred route. Manitoba Hydro also has a 1-800 number, an email address and website for the project which have been widely advertised for further project information.
2	The RM Council explained the RM of Ste. Anne feels very strongly that the route that was chosen is not the route the RM indicated was the best option for the community. The RM feels Manitoba Hydro did not listen. What is the point of this meeting today?	The Manitoba Hydro representative explained that the reason for the meeting today is to discuss the preferred route, review the process for getting to the preferred route and discuss next steps. Manitoba Hydro is interested in touching base with all stakeholders who have indicated interest in the project, and Manitoba Hydro would like to learn about potential mitigation opportunities of those potentially affected.
3	The RM Council mentioned that the RM is interested in learning how the interests of people in the area are incorporated into the route selection process?	The preferred route was identified through a structured decision making process. This process considered how well routes balance potential effects to human, technical and natural environments from the start to the end point. Data gathering, on the ground field work, and the input of numerous technical specialists, the public, and stakeholders over the course of two years have been taken into account when making this decision. Manitoba Hydro believes that the route presented best balances perspectives on the landscape and concerns that have been brought forward to date. Challenges exist in selecting any transmission line route. Manitoba Hydro evaluates routes from start to end point. In the vicinity of La Broquerie, the following concerns have been identified: <ul style="list-style-type: none"> · Potential effects of the project along the more western route that were considered in the decision making process include: a greater prevalence of privately owned lands, concerns related to the impact on property values, the proximity of the proposed route to homes near La Broquerie (from the edge of the ROW), the potential impact on proposed subdivisions, and agricultural land uses. · The more eastern route would travel through an area of relatively intact habitat that interconnects protected conservation areas and supports a number of valued species. The route would also effect an area noted for cultural and heritage value that is valued as a resource use area by the public, First Nations and Metis. From a technical perspective, this option is in much closer proximity to the existing 230kV and 500kV international power lines which poses a greater risk to system reliability should severe weather (e.g. wind events, icing, tornados, or fires) occur in the region.

		<p>The Manitoba Hydro representative explain that a set of criteria, determined by stakeholder and public feedback as well as discipline specialists, is used to provide a method to compare all routing options. Criteria based on natural, built, and engineering perspectives are used to review the options and see where strengths and weaknesses exist. Examples of the criteria include:</p> <ul style="list-style-type: none"> - Natural: acres of natural forest, acres of wetlands, stream and river crossings - Engineering: project cost, existing transmission line crossings and length - Built: proximity to residences, land use and capability, historic resources and public use areas <p>Further comparison is undertaken prior to determining a subset of routes or a preferred route. Comparative values include:</p> <ul style="list-style-type: none"> - Cost - Reliability - Community considerations - Risk to schedule - Built environment and the natural environment
4	<p>The Reeve of Ste. Anne congratulated Manitoba Hydro on not choosing the route along the TransCanada Highway, but still does not understand the reasoning behind the choice of routing within close proximity to the Town of La Broquerie rather than the route on the east side of the Watson P. Davidson Wildlife Management Area.</p>	
5		<p>The Manitoba Hydro representative indicated they would be sure to pass on the message of the RM's belief that this is not a preferred route.</p>
	<p>The Reeve of Ste. Anne went on to state that Manitoba Hydro has a way of getting people's hackles up. If the RM treated people the way Manitoba Hydro treats landowners we would not be re-elected. This is a callous disregard to go through private land when there is plenty of Crown land to go through that would not affect any people. Manitoba Hydro is antagonizing landowners in this area. Most people in this area are displeased with Manitoba Hydro's decisions. Ste. Anne wants Manitoba Hydro to know they are not amused. This message needs to be sent to the Manitoba Hydro representatives' superiors.</p>	

6	<p>The RM Council indicated the area south of Richer is the most unpalatable, as well as north of Richer. They would prefer to see Manitoba Hydro route the line down fireguard 13 all the way to the # 12 highway. This would make the most sense from our perspective.</p>	<p>The Manitoba Hydro representative indicated that the suggested route the RM is talking about was brought forth during the routing meetings as it is considered to be the best route from the built perspective. It was not the preferred route as it is not the route that best balances all the perspectives for the project.</p>
7	<p>The RM Council indicated that the section of the route south of Richer would not have to be a huge adjustment; even 2km further east would be a huge adjustment for the region. Fireguard 13 needs to be reconsidered and the RM of Ste. Anne firmly believes Manitoba Hydro has dropped the ball on this project and will continue to be very displeased if nothing is changed.</p>	<p>The Manitoba Hydro representative noted the comment.</p>

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Landowners	
Community / Participant	<u>Landowner</u>	
Round	<u>Round 3</u>	
Date of Meeting	Thursday, April 30, 2015	
Location	Manitoba Hydro 820 Taylor Ave. Office	
In Attendance	Landowners (2), Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description	The concerns in the landowners' email was reviewed. A sample Environmental Impact Statement (EIS), Construction Environmental Protection Plan (CEnvPP) and Technical Reports were provided.	
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The landowners asked about the rural property evaluation for the project.	The Manitoba Hydro representative replied that the rural property evaluation is underway but is not completed yet. It will be filed with the EIS. The evaluation is still in draft form and is currently going through a review.
2	The landowners expressed concern over the length and technicality of the EIS.	The Manitoba Hydro representative mentions that a plain language summary of the EIS is being prepared and how the EIS will be divided. There is a 90 day review period for the public from Manitoba Conservation and Water Stewardship.
3	The landowners asked when the 90 day review period will begin.	The Manitoba Hydro representative explained that the public review period begins after the EIS is filed. The government also has a technical advisory committee composed of various specialists that will review the EIS. Questions are compiled through this period.
4	The landowners asked if the questions from the review period are answered right away.	The Manitoba Hydro representative replied that the questions are answered after the 90 day review period is closed.
5	The landowners asked why transmission towers vary. They mentioned that they visited the transmission corridor along Mission Road to see the towers leaving Dorsey Station.	The Manitoba Hydro representative explained the various reasons why towers vary in height, including sag concerns when crossing overtop of other transmission lines.
6	The landowners asked what height of towers will be located on their property.	The Manitoba Hydro representative explained that the towers are likely to be around 40 meters tall. The taller towers are reserved for road and stream/river crossings.
7	The landowners expressed interest in wildlife and bird surveys conducted in their area by the discipline specialists.	The Manitoba Hydro representative explained there is some high value golden-winged warbler habitat in the area. A sharp tailed grouse survey was done just down the street from the landowner's property. Other studies for the project included breeding bird surveys, bird strike surveys, migration corridors, abundance and diversity surveys.
8	The landowners asked what the effect migratory corridors have on the routing process.	The Manitoba Hydro representative replied mitigation measures will be considered and flyways are considered during routing.
9	The landowners mentioned there are a lot of birds in the area and on their property. They expressed support for the protection of bird species.	The Manitoba Hydro representative explains that all factors considered in the routing decision are documented and outlined in the EIS.
10	The landowners asked about the environmental assessment process.	The Manitoba Hydro representative explained that the Environmental Assessment identifies potential effects from the project. Mitigation measures are developed for the potential effects. If the effects cannot be mitigated, they are considered residual effects.
11	The landowners mentioned that most of their property is a wetland and asked how will this effect construction.	The Manitoba Hydro representative explained that construction would likely occur in the winter. Manitoba Hydro wouldn't be clearing wetland vegetation. Trees are the primary target for clearing activities because they present a hazard to the line.
12	The landowners asked if environmental surveys were conducted along the whole route.	The Manitoba Hydro representative replied that various surveys were conducted along the whole route.
13	The landowners asked if surveying crews had entered private property.	The Manitoba Hydro representative replied that crews would only enter private lands if permission was granted from the landowner beforehand.
14	The landowners expressed concern that if their neighbor hadn't mentioned the proposed project, they wouldn't have known about the Manitoba Hydro's plans. Their names are still not on the land title.	The Manitoba Hydro representative explained the different notification methods used.
15	The landowners asked why Manitoba Hydro could not build the transmission line underground.	The Manitoba Hydro representative explained that there are increased costs associated with an underground transmission line. EMF exposure would also increase because the line is only a meter underground instead of 14 meters in the air.
16	The landowners asked how close to completion is the final route.	The Manitoba Hydro representative replied that the final preferred route would be presented in the summer. The phone line, email and other forms of communication are still available.
17	The landowners mentioned that they would prefer the H-frame structure. The H-frame structures are shorter and are easier to hide from the viewshed.	The Manitoba Hydro representative explained that more towers are required when using the H-frame structures and are not being considered for this project. The landowners could have up to 6 structures instead of only 2 or 3.

18	The landowners point out a small lake on the property and describe the importance of the view their future home. Tower spotting is discussed in relation to the viewshed.	The Manitoba Hydro representative records an area of preference for no towers on a map.
	The landowners expressed concern that they will be able to see the towers from where they plan to build their house. The landowners want the towers as far away from the house as possible.	The Manitoba Hydro representative explained that viewshed will be analyzed with different types of backgrounds like fields and forested areas. Renderings were completed and will be provided in the EIS.
20	The landowners expressed interest in seeing the EIS.	The Manitoba Hydro representative explained the different components of the EIS and CEnvPP with the landowners using the sample documents.
21	The landowners expressed safety concerns from lightning strikes, proximity to water and forest fires caused by the towers.	The Manitoba Hydro representative ensure the landowners that the towers are safe and grounded.
22	The landowners asked if they would receive tower payments? Their land is zoned as agriculture.	The Manitoba Hydro representative replied that the landowners would receive tower payments if the land was in fact zoned agriculture. The land would be considered pastureland.
23	The landowners asked how this project will affect electricity rates.	The Manitoba Hydro representative explained that the PUB approves or denies rate changes. A lot of Manitoba Hydro infrastructure is aging and requires replacement. This will increase rates.
24	The landowners asked if a conservation easement on their property would prevent Manitoba Hydro from routing the transmission line on their property.	The Manitoba Hydro representative explained that conservation easements do not restrict transmission development. Conservation easements are considered in the routing process. There are very few places Manitoba Hydro is restricted to route because of the Manitoba Hydro Act, however the end goal is still to protect the environment. The Environmental Assessment aims to enhance the project's positive effects while minimizing any negative effects.
25	The landowners asked about the construction process.	The Manitoba Hydro representative replied that foundations are poured first, followed by tower erection and then conductor stringing. Construction is likely to occur during the winter.
26	The landowners mentioned that they've talked to many Councilors, MLA and other politicians but no one has anymore information about the project.	The Manitoba Hydro representative replied that everyone has the same amount of information.
27	The landowners suggested that Manitoba Hydro parallels D602F.	The Manitoba Hydro representative explained that paralleling D602F was considered in the route evaluation process but did not meet all criteria.
	The landowners mentioned they see a lot of parallel transmission lines.	The Manitoba Hydro representative explained that they probably serve different purposes. For reliability reasons, it is important to separate similar sized lines serving similar purposes.
29	The landowners explained that the route modification they provided in the last meeting would not make them happy. It is only slightly better than the preferred route.	The Manitoba Hydro representative explained that the tower placement preference will be considered. However, tower placement depends on the project design and further measurement must be taken. The tower span is between 400 and 500 meters.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3

General Information

Title	Manitoba Wildlands Round 3 Meeting
Community / Participant	<u>Manitoba Wildlands</u>
Round	<u>Round 3</u>
Date of Meeting	Tuesday, April 28, 2015
Location	820 Taylor Ave.
In Attendance	Manitoba Wildlands (1), Manitoba Hydro (2)
Recorded by	Manitoba Hydro

Meeting Description

Meeting with Manitoba Wildlands to discuss the Manitoba-Minnesota Transmission Project. Information packages and E-sized maps were provided.

Discussion

Item	Community / Participant Comment	Manitoba Hydro Response
1	The Manitoba Wildlands representative indicated they have just gone through the CEC hearing for Lake Winnipeg Regulation and indicated there were issues they hoped they would not see for an MMTP hearing: - Lack of engagement filings - Felt Manitoba Hydro representatives were not well briefed on previous hearings - Felt Manitoba Hydro was not required to produce as much information as necessary - Wildlands felt there needed to be more plain language discussions in the hearing.	The Manitoba Hydro representative noted the issues and indicated that a Plain Language Summary will be produced for the Manitoba - Minnesota Transmission Project.
2	The Manitoba Wildlands representative asked if Manitoba Hydro has reviewed the recommendations from previous licences the company has received? Manitoba Hydro should consider the Environmental Impact Statement as a living document that will continue to evolve and change after it has been submitted. Numerous reviews and changes will occur.	The Manitoba Hydro representative explained that recommendations from previous licences have been reviewed many times.
3	The Manitoba Wildlands indicated that they did not have a chance to submit comments on the Manitoba - Minnesota Transmission Project scoping document. However, Manitoba Wildlands still intends to do so.	The Manitoba Hydro representative noted the comment.
4	The Manitoba Wildlands representative indicated they do not feel the use of MERX for RFPs is the best method, as it is open to all companies across North America to apply for the work. People outside of Manitoba will not know local issues as fluently as local people.	The Manitoba Hydro representative explained that Manitoba Hydro has a multi-criteria system when evaluating proposals, with additional points given to companies with Manitoba content
	The Manitoba Wildlands representative indicated they would like to see the Manitoba - Minnesota Transmission Project Environmental Impact Statement content to be at least to the same level of content as the St. Vital Transmission Complex Environmental Assessment. The St. Vital Transmission Complex assessment was much more readable and accessible compared to the Bipole III Transmission Project.	The Manitoba Hydro representative noted the suggestion.
6	The Manitoba Wildlands representative asked if there is any way of knowing what the Province intends to do for interveners in an NEB hearing?	The Manitoba Hydro representative replied that this is unknown to Manitoba Hydro.
7	The Manitoba Wildlands representative asked when will Manitoba Hydro submit the Environmental Impact Statement.	The Manitoba Hydro representative replied that they anticipate to submit the Environmental Impact Statement summer 2015.
8	The Manitoba Wildlands representative reviewed the routing methodology with Manitoba Hydro.	The Manitoba Hydro representative discussed with the Manitoba Wildlands representative the routing decisions for sitting the line on the west side of the Watson P. Davidson Wildlife Management Area.
9	The Manitoba Wildlands representative noted they would like to see more information on the United States side in the Environmental Impact Statement.	The Manitoba Hydro representative indicated the Manitoba - Minnesota Transmission Project ends at the border. There is a lot of information on Minnesota Power's website about the Great Northern Transmission Project. Manitoba Hydro can look into providing links to their information.

10	The Manitoba Wildlands representative asked for the division between Crown and private land for the route.	The Manitoba Hydro representative replied that the route occupies 25% Crown land, 42% private land and 33% Manitoba Hydro owned or leased land.
11	The Manitoba Wildlands representative asked about the Glenboro South Station.	The Manitoba Hydro representative indicated they will send further information and a map of the changes occurring at Glenboro South Station.
12	The Manitoba Wildlands representative asked if the Riel Converter Station is fully operational and the status on the ground electrode.	The Manitoba Hydro representative replied that the Riel Converter Station is not fully operational and will send Manitoba Wildlands more information about the station and ground electrode.
	The Manitoba Hydro representative asked what Manitoba Wildlands key concerns were with the project. Manitoba Wildlands representative explained that the main concerns are: - The region has not been studied enough - Archeological work needs to be done - The baseline studies need to go further back in time - More information regarding how the existing export lines are being used needs to be provided - What are the other contracts for export power.	The Manitoba Hydro representative will look into providing more information.
14	The Manitoba Wildlands representative explained that they have had conversations with the Bipole III Coalition.	The Manitoba Hydro representative noted the comment.
15	The Manitoba Wildlands representative asked what will the EIS have to say about the region? Manitoba Wildlands understands there is a corridor, but wants to stress that they will be looking for impact on the region.	The Manitoba Hydro representative noted the comment.
16	The process is a combination of points Wildlands' representatives have gleaned from conversations over the last few decades as well as from recent events. an example would be through discussion at a recent dinner with a Fisherman's Association during the Lake Winnipeg Regulation Hearings	What is Manitoba Wildlands process for establishing their issues?

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Round 3 Follow Up Meeting with the RM of Tache	
Community	<u>RM of Tache</u>	
Round	<u>Round 3</u>	
Date of Meeting	Friday, February 20, 2015	
Location	RM of Tache Municipal Building	
In Attendance	RM of Tache: 5 Council members, Public Works Manager, CAO & Assistant CAO Manitoba Hydro: (2)	
Recorded by	Manitoba Hydro	
Meeting Description		
Meeting began by providing council with 2 maps which outline the section of concern for the RM (28-9-7E1) and the proposed alignment for MMTP as well as the existing 230kV transmission line R49R.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	A council member asked how a value is determined for gravel when negotiations begin for the Project if a licence is granted for the Project.	The Manitoba Hydro representative explained that sales of gravel lots will be considered based on comparability as well as possible geotechnical boring to understand viability, remaining quantity and the demand of gravel. The Manitoba Hydro representative explained to council that there is to be no removal of gravel from beneath the right-of-way and that outside of the right-of-way there may need to be a slope of 3:1 or 2:1 depending on the terrain to limit erosion in proximity to the transmission lines. Council noted that this type of slope could limit extraction far outside of the right-of-way.
2	The a council member indicated that the current location of the preferred route intersects the future expansion plan of the quarry. Currently extraction is located on the west side of R49R.	The Manitoba Hydro representative noted the locations on the iPad.
3	A council member mentioned that there is 80,000 metric tons being removed every two years from the area in question. They estimate there is 100ft depth of gravel and is used in predominantly for management of road infrastructure and the traffic gravel program. They also noted that 2016 will be the next time they crush gravel.	The Manitoba Hydro representative indicated that access will be undertaken predominantly on municipal road right-of-way.
4	A council member began a discussion regarding overburden. It was noted that in the current location there is very little and in other areas around the RM has overburden of 30-45 feet. Reserves will need to be assessed to determine value prior to Manitoba Hydro being able to discuss compensation. It was noted that the location where the preferred route branches off of R49R are shallow pits.	The Manitoba Hydro representative noted the discussion.
5	A council member explained that these reserves are important for the next 100 years. Even if Manitoba Hydro were to purchase the gravel it would lead to having to search for the research and gravel is not getting cheaper.	The Manitoba Hydro representative noted the importance of gravel to the RM.
6	A council member noted that cartage fees must be considered in compensation during compensation discussions.	The Manitoba Hydro representative indicated that the affected active pit and the effects on the remainder will be discussed.
7	A council member inquired about the anticipated filing date, licensing, construction, and in-service timelines.	The Manitoba Hydro representative discussed the anticipated filing date, licensing, construction, and in-service timelines with council.
8	A council member asked as to who determines/proves depth for a compensation discussion.	The Manitoba Hydro representative indicated that any information that the RM would have would be beneficial in these discussions and that Manitoba Hydro would locate, determine, and research for available resource material which could include geotechnical work along the right-of-way.
9	A council member wanted it noted that they believe there is a 30-35 million dollar impact to the quarry over the next 60 years.	The Manitoba Hydro representative noted the anticipated impact to the quarry.
10	A council member wanted it noted that they believe that this route will affect the RM negatively and a different route should be taken in the RM where fewer quarries and landowners are located.	The Manitoba Hydro representative noted the concern.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Nature Conservancy of Canada Round 3 Meeting	
Community / Participant	Nature Conservancy	
Round	Round 3	
Date of Meeting	Tuesday, March 24, 2015	
Location	Nature Conservancy Office - Corydon	
In Attendance	Nature Conservancy (3), Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description		
Meeting with the Nature Conservancy of Canada. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	A Nature Conservancy representative commented that they thought Manitoba Hydro was taking a more robust approach to the natural environment in the environmental assessment. Was this a new approach for Manitoba Hydro?	The Manitoba Hydro representative explained that they tried to get stakeholders involved early in the process, before lines were on the map. The new methodology was tested and used in workshops a few years ago for the St Vital Transmission Complex. However, the opportunity to balance ecological and social issues was not as prominent for the St. Vital Transmission Complex because of the nature of the project being mostly in developed agricultural lands. The methodology helps Manitoba Hydro determine current and future land use. A discussion on land use plans and future subdivisions followed. The Manitoba Hydro representative explained how Nature Conservancy information on areas of conservation concern in the eastern area was incorporated into the process.
2	A Nature Conservancy representative commented that it's interesting Manitoba Hydro is trying to accommodate biodiversity. Nature Conservancy is working with areas that are always under constant pressure from development. It is interesting to see the other side of the coin (engineering and socio-economic perspectives). Is Manitoba Hydro continuing to evolve its thinking around biodiversity and ways to measure impacts, values surrounding biodiversity?	Manitoba Hydro is beginning a more ecosystem focused approach for Valued Components rather than each individual species.
3	The Nature Conservancy representative asked if Manitoba Hydro's environmental assessment approach is ground breaking compared to other utility companies.	The Manitoba Hydro representative explained that the company is pushing the consultants more than other utilities, especially against the use of a template approach to environmental assessments. Manitoba Hydro is also having trouble with public education on the importance of the environmental perspective.
4	The Nature Conservancy representative asked if Manitoba Hydro has found that there is a lack of value and understanding for the natural world during the project.	The Manitoba Hydro representative confirmed that we frequently encounter a lack of understanding for the natural world. There is a strong public preference to route on crown land.
	The Nature Conservancy representative asked if there are specialists on the ground studying ATK? Is the whole route being studied by disciplined natural specialist?	The Manitoba Hydro representative explained that field studies were conducted for the project. Field studies included access management, bird surveys, wetland surveys, stream crossing surveys, botanical surveys, wildlife surveys.
6	The Nature Conservancy representative asked about Manitoba Hydro's biosecurity policy.	The Manitoba Hydro representative explained that each business unit develops their own biosecurity protocols. Precautions may include brushing off equipment in the winter, pressure washing in the summer and sweeping equipment surfaces. If machinery comes from out of province without cleaning records, it is rejected on site.
7	The Nature Conservancy representative asked if the environmental data generated from the project will be available to the public.	The Manitoba Hydro representative explained that the bird data goes into the MB Breeding Bird Atlas. Other environmental data goes to Manitoba Conservation and Water Stewardship under a data sharing agreement.
8	The Nature Conservancy representative asked if endangered plant information from private lands was shared with the landowner.	The Manitoba Hydro representative replied that data collected on private lands is often shared with landowners at their request.
9	The Nature Conservancy representative asked if the field studies are contracted out.	The Manitoba Hydro representative explained that field studies are generally contracted to consulting firms.
10	The Nature Conservancy representative asked how Manitoba Hydro approaches ATK.	The Manitoba Hydro representative explained the biggest problem encountered during ATK is Chief and Council changes. Sometimes the new leadership does not agree with data and ATK must be restarted. Manitoba Hydro now uses self conducted ATKs. Self conducted ATKs were explained in detail to the Nature Conservancy representatives.
11	The Nature Conservancy representative asked if Buffalo Point First Nation and Roseau River First Nation have traditional land use in the project area.	The Manitoba Hydro representative explained that Buffalo Point First Nation does not have any interest in being involved with the project. Manitoba Hydro is working with Roseau River and other First Nations.
12	The Nature Conservancy representative asked if Roseau River First Nation has been good to work with.	The Manitoba Hydro representative replied that Roseau River has been good to work with. Roseau River First Nation is very interested in the project and sharing information. Sagkeeng, Black River and Swan Lake are also interested in the area.
	The Nature Conservancy representative explains that the organization is looking for opportunities to work in the boreal region. They are interested in meshing western science with traditional knowledge. Does Manitoba Hydro have an approach to combine the two types of data?	The Manitoba Hydro representative explains that it's a challenge to mesh traditional knowledge with western science. Manitoba Hydro has a dedicated chapter for Aboriginal Engagement and Traditional Land and Resource Use in the EIS.

14	The Nature Conservancy representative asked about the next steps in the project.	The Manitoba Hydro representative replied the EIS will be submitted towards the end of June 2015. Until then, Manitoba Hydro will continue meeting with stakeholders and consider minor adjustment. Other activities before the EIS is submitted include incorporating any new data sets and working with landowners on final alignments.
15	The Nature Conservancy representative asked if the minor adjustments to the preferred route will be considered before or after the EIS is submitted.	The Manitoba Hydro representative clarified that adjustments will be assessed before the EIS is submitted. Manitoba Hydro currently has a preferred route. The route may undergo adjustments and then become the final preferred route when the EIS is submitted.
16	The Nature Conservancy representative mentioned that the organization owns land near segment 209. Concerns were expressed over hydrological impacts from the towers. Has Manitoba Hydro decided on tower designs?	The Manitoba Hydro representative explained that foundations and access routes have not been selected, but tower design have been selected.
17	The Nature Conservancy representative asked what tower designs will be used in swampy areas.	The Manitoba Hydro representative explained that a screw pile design may be used in swampy areas. Manitoba Hydro does not anticipate any hydrological effects because the tower footprint is very small. A lot of studies were conducted for Bipole III on removing trees and the hydrological impacts were extremely minor.
18	The Nature Conservancy representative mentioned they did studies near south central Manitoba and found that roads affect hydrology.	The Manitoba Hydro representative explained there is no plan to construct any roads for the project. Construction in swampy areas will occur during the winter.
19	The Nature Conservancy representative asked how Manitoba Hydro replaces vegetation.	The Manitoba Hydro representative explained that for Bipole III, a vegetation management and rehabilitation plan was developed and describes the methods used. It is Manitoba Hydro's intention to use native seeds. The Manitoba Hydro representative explained rehabilitation plans for the Keewatinohk Station.
20	The Nature Conservancy representative asked if Manitoba Hydro has a native seed source for southern Manitoba. The Nature Conservancy representative expressed difficulty in finding seed suppliers.	The Manitoba Hydro representative explained that they rely on consultants to source native seeds.
21	The Nature Conservancy representative asked if there is any opportunity increase the demand for native seeds to make it an economically viable process.	The Manitoba Hydro representative explained that it is challenging to determine the volume of native seeds required. Up north, natural revegetation occurs successfully because there are few invasives to take over. The northern cone collection program was explained.
22	The NNC representative thought there should be a market for native seed collection. However the demand is too low to create a good market.	The Manitoba Hydro representative explained the uncertainties in predicting areas which areas require rehabilitation and the volume of seeds necessary.
23	The Nature Conservancy representative ask about routing challenges in the south.	The Manitoba Hydro representative replied that southern land routing has different challenges than northern projects.
24	The Nature Conservancy representative asked what Manitoba Hydro has learned about the elk herd.	The Manitoba Hydro representative replied that information on the elk herd will be included in the EIS and have not been found near the preferred route.
25	The Nature Conservancy representative asked if the interviews be included in the EIS so they know what people think about the elk?	The Manitoba Hydro representative replied that the interviews were conducted and will be included in the EIS.
26	The Nature Conservancy representative asked about stream crossing information.	The Manitoba Hydro representative explained that stream crossing field studies were completed but did do any field sampling for the species composition of the streams, and relied on existing data sources for that info.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Hylife Round 3 Meeting	
Community / Participant	Hylife	
Round	Round 3	
Date of Meeting	Friday, February 06, 2015	
Location	Hylife Office	
In Attendance	HyLife (2), Manitoba Hydro (3)	
Recorded by	Manitoba Hydro	
Meeting Description		
Meeting with Hylife to discuss preferred route and associated Hylife properties. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The Hylife representative explained that livestock operations are their highest concern. HyLife wants to understand Manitoba Hydro's bio-security policy to protect the stock during construction and operation.	The Manitoba Hydro representative reviewed the biosecurity policy with HyLife. If the owner's policy is more stringent than Manitoba Hydro's policy, Manitoba Hydro would adhere to that policy. If Manitoba Hydro's policy is more stringent we would use our policy. Any concern regarding biosecurity brought forth by a landowner is taken under serious consideration by Manitoba Hydro. Majority of construction occurs through the winter, to assist with leaving soil on the ground. When construction is done during spring, summer and fall months, the higher level of protection in the policy will be implemented. Manitoba Hydro staff are required to go through the Manitoba Hydro biosecurity policy training before entering properties with concerns. Manitoba Hydro shared the MH staff training power point presentation with HyLife. Manitoba Hydro would like to talk proactively with the facility before entering the property for construction, maintenance and operation.
2	The Hylife representative asked if Manitoba Hydro will do the construction or if it will be contracted out?	The Manitoba Hydro representative explained that construction will be contracted out in some instances. All contractors are required to follow these policies. The policies are detailed within the contract with the contractors. Manitoba Hydro also has environmental inspectors highly involved in the construction process to ensure the policies are being adhered to. Stop work orders from Manitoba Hydro can occur when needed.
3	The HyLife representative feels these are positive things that are implemented, but are concerned hearing that infractions do occur with contractors. And that discipline does not occur until after the infractions occur. This could damage HyLife operations to a great extent.	The Manitoba Hydro representative indicated that there have been many lessons learned from recent projects and we have learned which contractors are the best for considerations of environmental concerns. Due to the heavy agricultural presence on this route, Manitoba Hydro understands that there are issues that need to be carefully considered. The construction supervisors and environmental inspectors work together to be sure they are all in the same place at the same time. Manitoba Hydro will give a week's notice when they will be coming to the property and will discuss where the best access points are. Manitoba Hydro works cooperatively with the landowner to determine the best methods of access. These are requirements of the construction contractors and part of most license conditions.
4	The Hylife representative explained that communication during the construction and maintenance access is very important for HyLife. HyLife has clear bio-security policies and the gate is the main check point to the farm and very little traffic goes through the gate. This would be a big discussion point when access is discussed.	The Manitoba Hydro representative noted the importance of communication.
5	The Hylife representative mentioned Section 17 is a pasturing facility, which is less of a concern for biosecurity.	The Manitoba Hydro representative noted the facility.
6	The HyLife representative wants to understand what infrastructure would be planned for their land. Their preference would be to not have guyed wires. After the calves are weaned, cattle go there, 42 bulls and 130 cow and calf. Hay is cut here and manure spreading is also done here - a drag hose system is used for manure spreading in the whole section. Will the towers be fenced in?	The Manitoba Hydro representative replied that the towers are normally not fenced in, but that self supporting structures with fenced bases could be considered as mitigation for the concerns raised.
7	The HyLife representative asked how many towers per section?	The Manitoba Hydro representative replied that there will be a 400 to 500 meter separation between towers, depending on how high the wires need to be to clear for the farm equipment being used.
	The Hylife representative indicated a calving area on the map. All 800 cattle come back to the ridge in the spring (April to June) to calve. Hylife would definitely like to see no work in the area in the spring calving time. There are always animals in this area. Very intense time in the spring with 60 to 70 calves being born daily, lots of activity in this whole area. The calving barn is running right along the line, if there are problem animals they get moved into the barn. Don't want to put any more stress on the animals then we have to.	The Manitoba Hydro representative noted the request.
9	The Hylife representative made a request to move the line half a mile west to avoid the calving ridge.	The Manitoba Hydro representative explained the proposed alteration will be taken into consideration. Manitoba Hydro needs to analyze the requested alteration to understand what is happening on the landscape south of the alteration and what other effects this could have.
10	The Hylife representative replied that Maple Leaf would be affected if it was moved to the west. Maple Leaf operation is a hog operation. Also a recreation area directly south may be being built.	The Manitoba Hydro representative noted the comment.
11	The Hylife representative mentioned that if the towers cannot be moved from the ridge, the towers need to be fenced off and tower placement would be extremely important discussion for the project. A four strand barbed wire fence would be the best.	The Manitoba Hydro representative noted the comment.
12	The Hylife representative explained that manure spreading is also done on the calving ridge. It is done with a tractor and trailer, not a manure line. Bio-security in the cattle areas are not as important as the hog area.	The Manitoba Hydro representative noted the comment.

13	The Hylife representative asked if the land under the line will be owned by Manitoba Hydro?	The Manitoba Hydro representative explained that easements are preferred.
14	The Hylife representative indicated that there are a lot of fences throughout the property owned by HyLife.	The Manitoba Hydro representative indicated that Manitoba Hydro will work with the landowner to be sure to avoid the fencing, and ensure employees can access the property. Any damages will be compensated by Manitoba Hydro.
15	The Hylife representative asked if EMFs are a concern from the transmission line?	The Manitoba Hydro representative replied that there has been no research that indicates any issues with EMF in cattle areas. The exposure to EMF outside of the RoW is virtually non-existent.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	RM of La Broquerie Routing Meeting Round 3	
Community / Participant	RM of La Broquerie	
Round	Round 3	
Date of Meeting	Monday, February 23, 2015	
Location	La Broquerie Municipal Council	
In Attendance	La Broquerie Council and Reeve, Manitoba Hydro (3)	
Recorded by	Manitoba Hydro	
Meeting Description		
Manitoba Hydro gave an overview of the public engagement activities that occupied the week before in La Broquerie. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	The RM Council asked when was the last time Manitoba Hydro had discussions with the Manitoba Aerial Applicator Association?	The Manitoba Hydro representative indicated they spoke with a representative from the aerial applicator association during recent key person interviews.
2	Councillor Cameron Peters indicated a helicopter recently had a collision with a transmission line in Ontario and the regulations have now become more stringent. He indicated airplanes and helicopters cannot fly within 2000 feet of a transmission line. This has been in place for sometime but due to this accident the regulators are going to start enforcing the regulation more than before.	The Manitoba Hydro representative noted the accident. The Manitoba Hydro representative gave an overview of the routing process.
3	The RM Council asked if there are noise issues for people who live within 100 to 400 metres of the transmission line?	The Manitoba Hydro representative indicated that the noise from the transmission line is non- discernible.
4	The RM Council asked how far away does the transmission line need to be from hog operations?	The Manitoba Hydro representative replied that the transmission line does not have to be away from hog operations. There are considerations such as drag lines for manure spreading and biosecurity considerations when routing.
5	The RM Council asked if the landowner must pay for damage to the transmission line tower if they damage it?	The Manitoba Hydro representative replied yes, the landowner should get insurance for the transmission lines. Consideration of this additive cost is included in the Manitoba Hydro compensation package. The Manitoba Hydro representative reviewed the compensation brochure with council.
6	The RM Council asked why does it matter if the transmission line goes over a stream?	The Manitoba Hydro representative explained that the impact to the riparian area is the main concern for stream crossings. Therefore Manitoba Hydro ensures a buffer area between riparian areas and towers.
7	The RM Council asked how much does a farmer have to insure each structure for?	The Manitoba Hydro representative replied that they are unsure of this answer, but can look into it.
8	The RM Council asked if Manitoba Hydro has to follow any specific municipal zoning bylaws?	The Manitoba Hydro representative replied that Manitoba Hydro is exempt from zoning, although it is taken into consideration for the routing process.
	The RM Council asked if Manitoba Hydro has to take the best route the model gives them?	The Manitoba Hydro representative replied no but it would be ill advised not to as we believe we have all the information we could gather at the time. If new information comes to us, this is when we would reconsider the decisions as there is new information that needs to be considered. There have been a number of suggested modifications brought forth by members of the public in La Broquerie and these will be taken into consideration. Segments are not evaluated separately but full routes are, therefore there are no specific comparisons of 207 vs. 208 but there are some routes that assist in illustrating this.
10	The RM Council mentioned that the Fire Chief indicated to the RM that fire guard 13 on the east side of the wildlife management area would assist in the fire protection of the environmental considerations.	The Manitoba Hydro representative indicated fires are part of the cycles of natural areas.
11	The RM Council asked if Manitoba Hydro can move the project away from the Town of La Broquerie?	The Manitoba Hydro representative explained that most of the concerns we have heard regarding the reasons behind the need to move the line away from the town regard the proximity to the school and EMF. These concerns are based on misinterpretation of information; we can share scientifically proven information to correct the misinformation. Manitoba Hydro will not reroute to mitigate a concern that is based on a misinterpretation and not fact. Manitoba Hydro will work to help build an understanding of EMF associated with transmission lines and that we design to meet scientifically proven safe guidelines. But Manitoba Hydro can take into consideration information based on development and planning in the area. Manitoba Hydro requested that the RM provide information on development plans that are not captured in the recently updated RM Zones and Development Plan. Manitoba Hydro will not make decisions until all the suggested route modifications have been considered. If the route effects are minimized we can consider proposed modifications but if the route effects are just shifted and not minimized it is less likely to occur
	The RM Council mentioned Ted Falk's office has been in contact with the RM of La Broquerie and they cannot believe the project has not gone to the east of the wildlife management area.	The Manitoba Hydro representative noted the comment.
13	The RM Council asked who makes the final decision on the final preferred route that gets submitted in the EIS?	The Manitoba Hydro representative replied Manitoba Hydro makes the final decision.
14	The RM Council asked what is the size of the line running through Sage Creek.	The Manitoba Hydro representative replied that there is currently one 115kv line and there will be two additional 230kv lines with room for a fourth line.
15	The RM Council asked why Manitoba Hydro can't route along existing ROWs?	The Manitoba Hydro representative explained due to reliability reasons they are not able to route in the same ROW or within close proximity of a line used for the same purpose like the existing 500 kV transmission line.
16	The RM Council asked what concerns are associated with a route using Fireguard 13.	Fire Guard 13 runs along some small lot developments. Although there are more people in La Broquerie, people in Marchand would likely have the same concerns, while the numbers of people are taken into consideration a concern is still ranked the same no matter who voices the concern.

17	The RM Council asked how does Manitoba Hydro come up with the community value for routing decision making.	The Manitoba Hydro representative replied that the values come from information provided from the public, First Nations and 140 stakeholder groups. The selected route balances community perspectives. If it was purely a private landowner perspective it would be a different outcome.
18	The RM Council asked if it would be easier if Manitoba Hydro just scrapped the whole project? The Americans believe they will never use as much electricity as they do right now as the natural gas rates are currently so low.	The Manitoba Hydro representative explained Manitoba Hydro's interest in exporting clean, renewable hydro electricity to the USA to assist with offsetting rates for Manitobans. The USA will continue to decrease its use of fossil fuels and clean, renewable hydro electricity is an attractive option to fill the need for power.
	The RM Council mentioned that they felt nothing Manitoba Hydro has said today has indicated why segment 207 was chosen over 208.	<p>The Manitoba Hydro representative indicated they informed the Council of the reasons previously and repeated them for Council again. Why the option that sees the line run further West (closer to Labroquerie) is preferred...</p> <p>The preferred route was identified through a structured decision making process. This process considered how well routes balance potential effects to human, technical and natural environments from the start to the end point. Data gathering, on the ground field work, and the input of numerous technical specialists, the public, and stakeholders over the course of two years have been taken into account when making this decision. Manitoba Hydro believes that the route presented best balances perspectives on the landscape and concerns that have been brought forward to date. Challenges exist in selecting any transmission line route. Manitoba Hydro evaluates routes from start to end point. In the vicinity of La Broquerie, the following concerns have been identified:</p> <ul style="list-style-type: none"> - Potential effects of the project along the more western route that were considered in the decision making process include: a greater prevalence of privately owned lands, concerns related to the impact on property values, the proximity of the proposed route to homes near La Broquerie (from the edge of the ROW), the potential impact on proposed subdivisions, and agricultural land uses. - The more eastern route would travel through an area of relatively intact habitat that interconnects protected conservation areas and supports a number of valued species. The route would also effect an area noted for cultural and heritage value that is valued as a resource use area by the public, First Nations and Metis. From a technical perspective, this option is in closer proximity to the existing 230kV and 500kV international power lines which poses a greater risk to system reliability should severe weather (e.g. wind events, icing, tornados, or fires) occur in the region.
	The RM Council asked if the route is set in stone yet?	The Manitoba Hydro representative explained that the location of the route is not considered 'set in stone' until a license is granted for the Project. The regulatory review process for the project incorporates additional opportunities for the public to provide feedback and concerns directly to the Provincial and Federal agencies (Manitoba Conservation (provincial), National Energy Board (federal)) charged with determining whether to approve the project.
21	The RM Council asked what can residents do. What it would take to have the route modified?	The Manitoba Hydro representative encourages residents to attend the upcoming public open houses to share their specific concerns, or if unable to attend contact the project representatives by phone (1-877-343-1631) or email (mmtp@hydro.mb.ca). The on-going public engagement process is seeking input from landowners, the general public, stakeholder groups, First Nations, and Metis on the preferred route. Feedback received will enhance the environmental assessment that is underway. This assessment of the preferred route will examine the potential effects of the project and propose mitigation for potential effects. Minor changes to the route are still possible to accommodate localized concerns that are brought forward during the ongoing public engagement and assessment process.
22	The RM Council explained that they feel Manitoba Hydro is not valuing people in their decision making process from their perspective.	The Manitoba Hydro representative reiterated the purpose of the Public Engagement Program and that all feedback is carefully considered. The Fire Guard 13 option cannot be taken into consideration until the end of Round 3 when Manitoba Hydro has collected information from as much of the public as possible. If the RM is interested in supplying route modifications, Manitoba Hydro will take these modifications into consideration.
23	The RM Council asked where Fire Guard 13 is more populated would Manitoba Hydro consider putting in angle towers to move the line away from the populated areas?	The Manitoba Hydro representative explained this can be taken into consideration to understand if this is a reasonable cost to the project and what we have considered with other populated areas.
24	The RM Council asked about the project timeline.	The Manitoba Hydro representative replied that the EIS is anticipated to be filed in June 2015. Manitoba Hydro hopes to have a license decision in summer 2016, followed by construction 2017. The project in service date is 2020.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	Meeting with the RM of Stuartburn	
Community / Participant	<u>RM of Stuartburn</u>	
Round	<u>Round 3</u>	
Date of Meeting	Tuesday, February 03, 2015	
Location	Stuartburn Municipal Office	
In Attendance	RM of Stuartburn Reeve and Council, Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description		
A meeting was held at the Stuartburn Municipal Office to discuss the Manitoba-Minnesota Transmission Project. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1		The Manitoba Hydro representative reviewed the Ridgeland Cemetery handout with the RM Council.
2	The RM Council asked for the width of the ROW.	The Manitoba Hydro representative replied that the ROW will be 80 to 100 meters wide.
3	The RM Council asked how close will towers be placed to the old PR 402.	The Manitoba Hydro representative replied that the selection of a final preferred route needs to occur before towers can be spotted. Concerns will be shared with the design team.
4	The RM Council asked when meetings with landowners will begin.	The Manitoba Hydro representative indicated that Open Houses and Landowner Information Centers are beginning in February.
5	The RM Council asked when will hearings for the Project be announced.	The Manitoba Hydro representative replied that hearings are at the discretion of the Minister of Conservation and Water Stewardship.
6	The RM Council and the Manitoba Hydro representative discussed CAEPLA.	The Manitoba Hydro representative reviewed the compensation brochure with the RM Council.
7	The RM Council expressed interest in the potential of the Manitoba-Minnesota Transmission Project to host an optic cable to improve communications in the area.	The Manitoba Hydro representative indicated that Manitoba Hydro has worked with Telecom Companies in the past. Manitoba Hydro will consider this for the Project and noted a meeting with Manitoba Hydro communications staff would be arranged for further discussion.
8	The RM Council asked for the status of the United States regulatory process.	The Manitoba Hydro representative replied that the United States portion of the transmission line has received one step of required United States approvals, but that process is far from complete.
9		The Manitoba Hydro representative reviewed the border crossing with the RM Council.
10	The RM Council indicated that the routing and engagement process had raised levels of anxiety.	The Manitoba Hydro representative noted this concern and indicated that we will endeavor to answer questions and deal with concerns wherever possible.

Record of Meeting - Manitoba Minnesota Transmission Line General Information		
Title	Manitoba Infrastructure and Transportation Round 3 Meeting	
Community / Participant	<u>Manitoba Infrastructure and Transportation</u>	
Round	<u>Round 3</u>	
Date of Meeting	Wednesday, February 25, 2015	
Location	Manitoba Infrastructure and Transportation Office 215 Garry Street.	
In Attendance	Manitoba Infrastructure and Transportation (11), Manitoba Hydro (4)	
Recorded by	Manitoba Hydro	
Meeting Description		
The meeting with Manitoba Infrastructure and Transportation began with an overview of the Project description, routing process, anticipated timeline and regulatory process. Information packages and E-sized maps were provided.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	A Manitoba Infrastructure and Transportation representatives asked what type of tower would be used for the southern loop.	The Manitoba Hydro representative replied that self-supporting structures will be used for the southern loop.
2	A Manitoba Infrastructure and Transportation representatives asked why a traffic impact assessment is being conducted for the project.	The Manitoba Hydro representative explained that traffic is a component of the socio-economic environment, which is required to be assessed as part of the regulatory process.
3	The Manitoba Infrastructure and Transportation representatives expressed concerns about tower placement in the vicinity of the floodway inlet control structure and on the floodway embankment.	The Manitoba Hydro representative indicated that further discussion could occur regarding tower placement at the floodway inlet control structure and tower placement on the floodway embankment. The Manitoba Hydro representative added that an existing agreement is in place regarding towers situated on the floodway embankment.
4	The Manitoba Infrastructure and Transportation representatives expressed concerns about tower placement in the Seine River Siphon area. Safety clearances are required for large machinery used in the maintenance of the siphon, which diverts water from the Seine River into the floodway.	The Manitoba Hydro representative indicated a meeting can occur to discuss the specifics of the Seine River Siphon area and tower placement.
5	The Manitoba Infrastructure and Transportation representatives explained that the preferred route is in close proximity to a marshalling yard used for the maintenance of the floodway and adjacent lands. The representative expressed concerns regarding worker health at the marshalling yard from EMFs.	The Manitoba Hydro representative noted that International research on EMF indicates there are no health effects from transmission lines.
6	The Manitoba Infrastructure and Transportation representatives expressed concerns that additional transmission lines along the Manitoba-Minnesota Transmission Project right-of-way may affect to operation of the marshalling yard.	The Manitoba Hydro representative noted the concern and indicated that further discussions could occur regarding the transmission line's proximity to the marshalling yard.
	The Manitoba Infrastructure and Transportation representatives discussed the Highway 1 expansion project to six lanes in relation to the location of the current northeastern tower.	The Manitoba Hydro representative noted the concern.
8	The Manitoba Infrastructure and Transportation representatives indicated that there was some recent correspondence about the need for various Manitoba Infrastructure and Transportation permits associated with Manitoba Hydro Projects. The representatives underscored the importance that all necessary permits are required prior to construction if granted a licence.	The Manitoba Hydro representative noted the concern.
9	A Manitoba Infrastructure and Transportation representative from the Mines Branch was asked if there were any concerns with the route in relation to provincial quarries of interest.	The Manitoba Hydro was informed that Manitoba Infrastructure and Transportation had no concerns with the route.

Record of Meeting - Manitoba Minnesota Transmission Line - Round 3		
General Information		
Title	IRMT Meeting Round 3	
Community	<u>IRMT</u>	
Round	<u>Round 3</u>	
Date of Meeting	Tuesday, February 17, 2015	
Location	Eastern Region District Office, Lac Du Bonnet, Manitoba	
In Attendance	IRMT (10), Manitoba Hydro (2)	
Recorded by	Manitoba Hydro	
Meeting Description		
Manitoba Hydro representatives provided an overview of current project status as well as the preferred route.		
Discussion		
Item	Community / Participant Comment	Manitoba Hydro Response
1	IRMT asked whether the varied towers were being driven by cost.	The Manitoba Hydro representative explained that the use of self supporting towers is for agriculture as they are easier for farmers to work around, guyed towers are cheaper, used primarily in northern or wetland areas to allow for frost, cost, flexibility and durability.
2	IRMT asked if this line be will be supplemental to D602F?	The Manitoba Hydro representative explained that D602F is maximized. This line is used for exports and imports, used example of BPIII reliability, one of the reasons for MMTP to is help provide backup power if wind event or emergency. Primary reason for MMTP is for export but also part of it would be reliability and import (part of reliability criteria is separation of D602F and MMTP designed during routing).
3	IRMT asked if this route was probably a better choice for reliability?	The Manitoba Hydro representative replied yes, that is part of the planning but we avoid wetlands and areas where maintenance may be a problem where possible, as well as all the other inputs.
4	A representative stated to the IRMT Group that any questions should be sent to himself and will be forwarded to 2 others	The Manitoba Hydro representative agreed and requested questions be sent sooner than later, so they can respond to any concerns at this stage as opposed to being submitted through TAC.
5	IRMT requested a better map for discussion purposes. For work permitting, is Manitoba Hydro breaking this into segments? It is easier for enforcement to break things down into sections, easier to manage staging areas, etc.	The Manitoba Hydro representative explained it won't be split up as it was in BPIII. This will likely be contracted to one contractor as well.
6	IRMT pointed out that there are only three sections that cross crown land and those will be the way conservation will split them up for enforcement.	The Manitoba Hydro representative noted the comment.
7	IRMT commented that they would likely refuse any crown land applications for camps.	The Manitoba Hydro representative noted the comment.
8	IRMT asked if there are any plans of putting a converter station at the border, or if Manitoba Hydro only needs the converter station at the end of the Bipole III line.	The Manitoba Hydro representative explained this is an AC line and no converter station is required.
9	IRMT asked, of those five routes, how is it decided upon given competing interests from community.	The Manitoba Hydro representative replied that community and cost were highly weighted in the preferred route determination process. Community consists of the public, stakeholders, First Nations and Metis.
10	IRMT asked if those weightings available to the public?	The Manitoba Hydro representative replied that process and determination will be in the EIS, stats, and analysis, and placed on the public registry once submitted this summer 2015.
11	IRMT asked why the existing lines aren't upgraded instead of new lines?	The Manitoba Hydro representative explained that upgrading existing lines was looked at it. The problem is lines have to be taken out to upgrade, you would need an outage for many people over a long period of time. An international power line outage is that much more difficult.
12	IRMT mentioned that there are many corridors and why can't Manitoba Hydro consolidate them?	The Manitoba Hydro representative provided an example of the Point du Bois decommissioning, we did have to build a new corridor and used a portion of the retired line to do so. Double circuiting is a problem because of the line outage and risk of amalgamating lines would be incredibly expensive and put reliability at risk.
13	IRMT asked if there a slide that shows the line south of Marchand, for clarification on the width of the ROW.	The Manitoba Hydro representative confirmed the width of the right-of-way as being 80m with self supporting or 100 m with guyed structures.

14	IRMT expressed interest in bog area near the border and wanted to see the routing in that area.	The Manitoba Hydro representative explained the diagonal portion of the route in the south near boggy area of the border and work done with the local landowner.
15	IRMT asked at X numbers of dollars to build, how long does the line pay for itself?	The Manitoba Hydro representative explained that the answer is very complicated because Manitoba Hydro is building a larger than what is currently required. Minnesota Power only needs a 230 kV line to acquire the power they are purchasing. To take advantage of future opportunities for power sales, Manitoba Hydro has agreed to build a larger transmission line, which will require only one new right-of-way. This will also minimize the overall environmental impact.
16	IRMT asked why cost recovery isn't known?	The Manitoba Hydro representative explained it likely has been calculated but was not known by the Manitoba Hydro representatives.
17	IRMT asked if Manitoba Hydro has a shapefile?	The Manitoba Hydro representative replied that the shapefile is available and others confirmed that they had it.
18	IRMT asked how landowners are compensated?	The Manitoba Hydro representative explained the landowner compensation policy being offered.
19	IRMT asked if Manitoba Hydro pays compensation if maintenance crews damages crops when they have to come in to maintain the line.	The Manitoba Hydro representative explained that Manitoba Hydro would pay compensation for damages during maintenance based on what is grown and how much has been damaged.

THE RURAL MUNICIPALITY OF REYNOLDS

P.O. Box 46
Hadashville, Manitoba R0E 0X0

Telephone: 204-426-5305
Fax: 204-426-5552
Toll Free: 1-888-864-4861

E-mail: rmreynol@mymts.net
Website: www.rmofreynolds.com

March 9th, 2015

Manitoba Hydro
820 Taylor Ave (3)
PO Box 7950 Stn Main
Winnipeg, MB
R3C 0J1

Attention: Trevor Joyal, Environmental Specialist

Dear Mr. Joyal:

Re: Manitoba/Minnesota Transmission Line

Further to my letter dated July 8th, 2014 (copy attached), although the earlier alternate routes have been eliminated from the updated Refined Alternate Routes document, Council for the R.M. of Reynolds wishes to reiterate its stance that the municipality is still agreeable to Manitoba Hydro choosing the most easterly transmission line route, from the original alternate route selection.

This route would be situated on Crown Land which has no existing or proposed residential development and no agricultural lands.

Although Manitoba Hydro has existing parallel transmission lines in the RM of Reynolds, Council understands your concern that a single event such as a fire, tornado or ice storm could affect both transmission lines. Fortunately, there are also other options such as paralleling a gas transmission line or any number of existing Fire Guard roads.

Please reconsider the benefits of building the transmission line through the R.M. of Reynolds, especially the lack of opposition to the original easterly route.

Sincerely,

 S. Amos. A.C.A.O.

 Trudy Turchyn
Chief Administrative Officer

cc: RM of Tache
cc: RM of La Broquerie
cc: RM of Stuartburn

cc: RM of Ste. Anne
cc: RM of Piney

THE RURAL MUNICIPALITY OF REYNOLDS

P.O. Box 46
Hadashville, Manitoba R0E 0X0

Telephone: 204-426-5305
Fax: 204-426-5552
Toll Free: 1-888-864-4861

E-mail: rmreynol@mymts.net
Website: www.rmofreynolds.com

July 8th, 2014

Manitoba Hydro
820 Taylor Ave (3)
PO Box 7950 Stn Main
Winnipeg, MB
R3C 0J1

Attention: Trevor Joyal, Environmental Specialist

Dear Mr. Joyal:

Re: Manitoba/Minnesota Transmission Line

Council for the R.M. of Reynolds wishes to advise that they would be agreeable to Manitoba Hydro choosing the most easterly alternate route, from the original alternate route selection.

This route would be situated on Crown Land in areas which do not have residential development and likely, never will. This option may relieve some opposition from our neighbouring municipalities based on the refined alternate routes being located on prime farmland.

The new transmission line could easily parallel the existing 500kV line for ease of access and maintenance.

Please consider the benefits of building the transmission line through the R.M. of Reynolds.

Sincerely,



Trudy Turchyn
Chief Administrative Officer

cc: Bill Heather, Councillor RM of Tache

cc municipalities



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Ottawa

Room 300, Justice
Building
Ottawa, Ontario
K1A 0A6
Tel: 613-992-3128
Fax: 613-995-1049
ted.falk@parl.gc.ca

Constituency

227 Main Street, Suite 8
Steinbach, Manitoba
R5G 1Y7
Tel.: 204-326-9889
Fax.: 204-346-9874
ted.falk.c1@parl.gc.ca



Ted Falk

Member of
Parliament / Député
Provencher

Ottawa

Pièce 300, Édifice de la
Justice
Ottawa (Ontario)
K1A 0A6
Tél.: 613-992-3128
Télééc.: 613-995-1049
ted.falk@parl.gc.ca

Circonscription

227, rue Main, Unité 8
Steinbach (Manitoba)
R5G 1Y7
Tél. : 204-326-9889
Télééc. : 204-346-9874
ted.falk.c1@parl.gc.ca

MR/RM DE/OF
LA BROQUERIE
CP/BOX 130
LA BROQUERIE MB R0A 0W0

COPY

February 13, 2015

Manitoba Hydro
Attention: Maggie Tisdale
360 Portage Avenue
Winnipeg, MB
R3C 0G8

Dear Ms. Tisdale,

I have been contacted by constituents in the Rural Municipality of LaBroquerie over the past several weeks regarding the preferred route of the Manitoba-Minnesota Transmission Line.

I understand that Route 208 is Manitoba Hydro's preferred route. However, my constituents have suggested that route 207 would have far less impact on residents in the area due to the fact that the line would be generally located on uninhabited crown land.

Both of the schools as well as most of the businesses and homes are located within a mile of MB Hydro's preferred route.

LaBroquerie is among the fastest growing areas in Manitoba and this route would certainly hinder any further development to the east.

I ask that Manitoba Hydro seriously considers the impacts that route 208 would have on area residents and consider their request to make 207 the preferred route.

Thank you for your consideration of this matter.

Sincerely,

Ted Falk

Ted Falk
Member of Parliament for Provencher



MINUTES OF THE REGULAR MEETING OF THE RURAL MUNICIPALITY OF LA BROQUERIE HELD IN THE COUNCIL CHAMBERS IN THE VILLAGE OF LA BROQUERIE, MANITOBA ON WEDNESDAY, FEBRUARY 11TH, 2015.

Res. No. 75-15 MOTION: Darrell Unger – Lewis Weiss

WHEREAS Manitoba Hydro is proposing the Manitoba-Minnesota Transmission project, which entails construction of a 500-kilovolt transmission line from Dorsey Station in Winnipeg to the Manitoba –Minnesota border;

AND WHEREAS Manitoba Hydro has determined a preferred route for the Project;

AND WHEREAS the preferred route is anticipated to be directly through La Broquerie Municipality and one mile within town;

AND WHEREAS Council has met with the public to discuss their comments and concerns regarding the transmission project;

AND WHEREAS the Rural Municipality of La Broquerie and our citizens have several major concerns and objections with the preferred route #208;

AND WHEREAS the Council of the Rural Municipality of La Broquerie is of the opinion that Route #207 offers the least disruptive and economical route for the citizens and Manitoba Hydro;

THEREFORE BE IT RESOLVED THAT the Council of the Rural Municipality of La Broquerie on behalf of its citizens, strongly urge Manitoba Hydro to consider alternative Route #207 as the logical alternative for this project.

CARRIED

MINUTES OF THE REGULAR MEETING OF THE RURAL MUNICIPALITY OF LA BROQUERIE HELD IN THE COUNCIL CHAMBERS IN THE VILLAGE OF LA BROQUERIE, MANITOBA ON WEDNESDAY, MAY 14TH, 2014.

Res. No. 172-14 MOTION: Claude Lussier – Darrell Unger

WHEREAS Manitoba Hydro is proposing the Manitoba-Minnesota Transmission project, which entails construction of a 500-kilovolt transmission line from Dorsey Station in Winnipeg to the Manitoba –Minnesota border;

WHEREAS Manitoba Hydro has refined alternative routes from Dorsey Station to a preferred border crossing;

AND WHEREAS Manitoba Hydro has held public open houses, meetings and workshops to gather information on routing criteria as well as feedback from all concerned parties;

AND WHEREAS Manitoba Hydro met with elected officials from the Rural Municipality of La Broquerie to hear their input;

AND WHEREAS two alternative routes were presented to the municipality and concerned citizens;

AND WHEREAS the Rural Municipality of La Broquerie have several major concerns and objections with the refined alternative Route #208;

AND WHEREAS the Council of the Rural Municipality of La Broquerie is of the opinion that Route #207 offers the least disruptive and economical route for the citizens and Manitoba Hydro;

THEREFORE BE IT RESOLVED THAT the Council of the Rural Municipality of La Broquerie on behalf of its citizens, strongly urge Manitoba Hydro to consider alternative Route #207 as the logical alternative for this project.

CARRIED

Against Manitoba Hydro's
Route 208

Real Nadeau

22

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Real Nadeau	Box 347 La Broquerie	424-5101		<i>Real Nadeau</i>
Rose Nadeau	Box 64 La Brog Road	804-424 5364		<i>Rose Nadeau</i>
Ant. Nadeau	Box 64 La Brog Road	204-424 5364		<i>Ant. Nadeau</i>
Charles Belisle	Box 218 La Brog	204 4245385		<i>Charles Belisle</i>
Dolores Champagne	Box 218 "	4245385		<i>Dolores Champagne</i>
Danielle Gauthier	Box 614	424-5615		<i>Danielle Gauthier</i>
STEPHANE GAUTHIER	BOX 614 SW 30-6-86	424-5615		<i>Stephane Gauthier</i>
Candace Link	Box 980 La Broquerie	371-5800		<i>Candace Link</i>
Claude Champagne	Box 21042 Stankach	346-2282		<i>Claude Champagne</i>
Daniel B WENNEN	Box 16 La Broquerie	424-5178		<i>Daniel B WENNEN</i>
Maarva Velthuis	Box 385	424 5056		<i>Maarva Velthuis</i>
Corvan Velthuis	Box 385	424 5056		<i>Corvan Velthuis</i>
Teunis van Velthuis	Box 385	424-5056		<i>Teunis van Velthuis</i>
Marjorie Nadeau	Box 347	392-0539		<i>Marjorie Nadeau</i>
Catherine Nadeau	Box 347	880-4843		<i>Catherine Nadeau</i>
Steve Bostrom	194 Balmoral St	4146301		<i>Steve Bostrom</i>
Hubert Mireault	La Broquerie	424-5400		<i>Hubert Mireault</i>
Yvon Mireault	La Broquerie	424-5410		<i>Yvon Mireault</i>
Henriette Funk	La Broquerie	424-9260		<i>Henriette Funk</i>
Ken Feb	La Broquerie	424-920		<i>Ken Feb</i>
JEAN-LOUIS MIREAULT	LA BROQUERIE	424-5450		<i>J.L. Mireault</i>
DIANE Mireault	LA Broquerie	424 5650		<i>Diane Mireault</i>

Against Rte 208

André Lord
380.3179

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Huw DAVIES	Box 35 La Broquerie	424-9705		
Pascale Normandeau	Box 526, LB, MB	204-818-0685		
Isabelle Houdo	C.P. 314 La Broquerie	204 424-9443		
EDOUARD GAGNON	C.P. 293 La Broquerie	204-424-5484		
Angèle V. Bisson	Box 456 La Broquerie	204-424-9635		
Denis Carrière	Box 227 La Broquerie	346 2184		
Rita Carrière	C.P. 227 La Broquerie	424-5223		
Gaetan Bisson	C.P. 456 La Broquerie, MB R0A 0W0	424-9635		
Frene Tétrault	C.P. 359 La Broquerie MB R0A 0W0	204-424-5728		
Céline Gagnon	C.P. 293 La Broq.	204-424-5484		
Ron Vieilfaure	C.P. 93 La Broquerie	424-5570		
Denise Vieilfaure	C.P. 93 La Broquerie	424-5570		
Julie Arnaud	C.P. 472 La Broquerie	424-5811		
Claude Arnaud	Box 472 La Broq.	424-5811		
Louis Tétrault	C.P. 359 La B	424-5728		
Cynthia De Almeida	29, rue Normandeau	424-5287		
Guillaume Dupuis	29, rue Normandeau	424-5287		
Jody Rowan	337 Richer, MB	371-0190		
Diane Decelles	C.P. 226 La Broquerie	424-5528		
ANGÈLE HIC	C.P. 271 La Broquerie	422-8077		
Linda Fournier Whitesel				
Gaetan Simard	C.P. 772 La Broquerie	320-9438		
Martin Bazin	Box 808, La Broquerie MB	424-5715		
Nicole St-Vincent	C.P. 115 Marchand	2791-4301		
Jessica Bazin	19 Loutrel Bay La Broq.	424-5715		

Against Manitoba Hydro's
Route 208

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Nettie Weiss.	Box 549 La Broquerie	424-4040	weissanto @mts.net.	
Fred Yelinski	NW 896E	422-9516		
Madeleine Krieger	LA BROQUERIE	340-5945		
René Gagnon	Box 224 La Broquerie	424-5081	slurpees 77 @gmail.com	
René-François Faullard	Box 11 Marchand	424-9886		
SERGE NADON	LABROQUERIE Box 425	424-9443		
Dan Charette	La Broquerie Box 769	371-7553		
Janine Lamyande	Box 780 La Broquerie	869-4652		
Jelke Kulchyski	Box 690 La B	346-3829		
Frédéric Kehler		494-9604		
Marta Verrier	Box 87 La Broquerie	424-5748		
Gisèle Benzze	Box 367 LABROQUERIE	424-5102		
Ray Pelletier	Box 203 La Broquerie	424-5587		
Christelle Duroy	Box 465, LABROQUERIE	424-9366		
Raymond Laroche	Box 4, RCMR	792-6103		
Jeanne Trudeau	Box 884, La Broquerie	392-0212		
Daniel Trudeau	Box 884 La Broquerie	392-3908		
Gisèle Verrier	Box 190 La Broquerie	424-5253		
ART BROESKY	Box 92 Marchand			
Nicole Taillefer	Box 322 La Broquerie	424-5459		
Landon Hudson	LA. Broquerie			
Amanda Alquin	Box 671 La Broc	424-5477		
Kyle Duncan	Box 671 LA BROQUERIE MP	204-434-5477		
Kenneth Tolin	BOX 352 La B	424-9477		
Sandra Limburg	Box 467 La B	424-4066		

Against Manitoba Hydro's
Route 208

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Nicole Lafrenière	La Broquerie	424-5724	nicolelaf@ms.net	Nicole Lafrenière
Tyler Jordanov	la broquerie	371-8055		Tyler Jordanov
JASON GIESBRECHT	La Broquerie	392-3102	jng740@gmail.com	Jason Giesbrecht
CLAUDE CHARLIER	LA BROQUERIE	371-7257		Claude Charlier
Marc Gauthier	La Broquerie	380-4046		Marc Gauthier
Bertha Braun	Box 177 ROAD 0	424-5360		Bertha Braun
KARL HOFFENBERG	46081 RD 350	424-5123		Karl Hoffenberg
Murielle Gagnon	LA BROQUERIE	424-5601		Murielle Gagnon
Danielle Audette	" "	794-5500		Danielle Audette
Alex Nadeau		381-2534		Alex Nadeau
Lucie Renaud	La Broquerie	424-5306		Lucie Renaud
KATH NADEAU	La Broquerie	424-9443		Kath Nadeau
Michelle Frankard	Cooper La Broquerie	424-9838		Michelle Frankard
Robert Cooper	La Broquerie	424-9838		Robert Cooper
Destinee Dupont	La Broquerie	392-9637		Destinee Dupont
Lucianne Zestrau	La Broquerie	424-5927		Lucianne Zestrau
Teo Vandal	La Broquerie	424-5940		Teo Vandal
Debbie Friesen	La Broquerie	424-5940		Debbie Friesen
Jesse Gigolph	La Broquerie	424-5294		Jesse Gigolph
C Brindle	La Broq.			C Brindle
MARTY TREWITT	" "	371-9890		Marty Trewitt
K. Johnston	La Broquerie	424-5918		K. Johnston
David Wall	La Broquerie	424-5870		David Wall
JEAN KIROUAC	La Broquerie	787-5570		Jean Kirouac
R. Taillefer	La Broquerie	424-9995		R. Taillefer

Against Manitoba Hydro's
Route 208

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
J. Picklyk	La Broquerie	424.9995		
A. Bois	51 St-Charles	326-6083		
K. Madoff	La Broquerie	891-5639		
P. de Jong	La Broquerie	1 800 help		
Jennifer Jewett	La Broquerie	424 5230		
Gil Gagnon	La Broquerie	424-5843		
Maurice Gagnon	La Broquerie			
Debra Dalzell	La Broquerie			
Ronald Laurin	La Broquerie			
Brian Freund	La Broquerie	326-7216		
Mariette Kivroux	La Broquerie	424-5709		
TONY GAGNON	"	424.5025		
ARNOLD AAR	"	326-8203		
A. Hohenberg	La Broquerie	424 5123		
Cheryl Bourquin	La Broquerie	424 5161		
J. D. D.	La Broquerie	422 9529		
FERNAND BOUY	LABROQUERIE	424-5658		
FRANK DANKOWSK	LABROQUERIE	424-9286		
ART BARRON	La Broquerie	424-8403		
Nina Widmer	LaB / Marchand	424-9552		
Scott Toward	LaB / Marchand	424-9552		
Gisela Widmer	Marchand	424-9552		
Richard Carr	Marchand	424-5895		
Robert Decelles	La Broquerie, NB	(204) 370-6048		

WITHIN 1 MILE RADIUS OF LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Andreas Fehr	Box 245 La Broquerie	371 1704	andreasfehr@ yahoo.ca	
Ameliese Uegener	Box 338 La Broquerie	424 5019		Ameliese Uegener
Jacob Fehr	Box 245 La Broquerie	371 3249	camfehr@ yahoo.ca	
FRANZ FELNHOFER	Box 61 LA BROQUERIE	326 0273	felnhofe@hotm... il.com	
FRANZ FELNHOFER	Box 61 LA BROQUERIE	326 0288	eurohaus@eurohaus custombuilders.com	
Darren Bouchard	Box 364 La Broquerie	424-5295	dbouchard@mynt s.net	
ADRIAN TICHELAAR	Box 379 LABROQUERIE	424-5705	MORNINGVIEW EXPLORER.CA	
Oleg Prus	Box 215 La Broquerie	380-9156	prus36@puka .com	
W. de L'Horizon	Boris La Broquerie	424 5621		
Manuel Mueinelt	Box 308 La Broquerie	424-5214		Manuel Mueinelt
Jürgen Köhler	Box 156 Brunkild, MB	204-990- 6115	jurgenkoehler@ shaw.ca	
Alain B...	Box 216 LA BROQUERIE	346-2975	noelbrenaud @hotmail.com	
John Banman	Box 5516 Burg.	424 5707		
P. de Jong	ROADWO	1 800 Help	de_jo_moo @mynt s.net	
Joch Bouchard	Box 364 ROADWO	1-204-392-4569		
Colles Lord	4185 La Broquerie	424 5279	clord4@mynt s.net	
David Wall	84 rue Simard	371 1519	david_ca1@hotm ail.com	
David Dawson	41026/33 N	204 424-5042		
Richard Turenne	Box 603/43	raymond Giroux 424-5942	rice_turenne@hot mail.com	
Henry Turenne	Box 101 LAB.	424 9101	hturenne@hotmail.com	Henry Turenne
Tony St-Hilaire	2 Granger. St.	424-9433		Antoine St-Hilaire
Jeannette St-Hilaire	2 Granger St.	424-9433		Jeannette St-Hilaire
Fernand Piché	Box 104 LAB.	424-5513		
Natalie Paquin	Box 603 LAB.	424-5942	paquin.natalie@y ahoo.ca	Natalie Paquin
DENISE Hildebrand	21 Simard/ Box 575 LABROQUERIE, MB ROADWO	424 4068	schilde@mts.net	Denise Hildebrand

Box 575
LABROQUERIE, MB
ROADWO

WITHIN 1 MILE RADIUS OF LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Patrick Dharm	13 Dubé Street	204-424-4044	patcramus@hotmail.com	
Manique Bedard	SE 7-78E	424-5695	bedardman@gmail.com	M. Bedard
ALBERT BEDARD	SE 7-78E	424-5695	"	Albert Bedard
Gérard Fournier	SW 29-6-8E	424-5440	/	
Scott Broesky	SW 29-6-8E	424-5884	scottbroesky@hotmail.com	
ROSLINE BRÉMAUD	SW 9-6-8E	424-5648		R. Brémaud
Marcel Brémaud	SW 9-6-8E	424-5648		M. Brémaud
Bill Conway	NE 21-5-8E	424-5711		
Fred Melinck	NW 6 9 8 E	424-2951		
Marie Feltin	1.1	"		
Dennis Smook	VIA	892 3152		D. Smook
Bernard Lemer		7-78	7-78	
Margaret				
Jacqueline Tremmer		424-5167		J. Tremmer
Alain Fournier		424-5167		A. Fournier
Ray Pelletier	La Broquerie	424-5587		Ray Pelletier
Hubert Mercier	La Broquerie			
René Wagners	LA BROQUERIE	424-5101		
ALBERT BOURRICE	LA BROQUERIE	424-5372		
Jean				
MARC DE KLEIN	LA BROQUERIE	424-5838	DMDENLEIN@MYMTS.NET	
Johann Wagner	NW 18-6-8E	424-5632	hwagner@mts.net	Johann Wagner
Diane Wagner	NW 18-6-8E	424-5632	↑	Diane Wagner
André Lord	115 Main St. 2nd	380-3579	André.Lord@mts.net	
Nicole Tétrault	115 Principal St.	371-6204		N. Tétrault

Against Manitoba Hydro's
Route 208

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
CAROLYN FRIESEN	487 LA BROQUERIE	386-8177	carolyn@manitoba.ca	
WILLI WIEBE	Box 959 LA BROQUERIE	380-3746	will@mts.net	
Geord Youngman	Box 89	424-5440		
Jean Carvill	Box 22	326-9876		
Louis Balcaen	Box 5	424-5434		
Dean Weiss	Box 549	424-5492		
Susan Balne	32738 RD 39E	326-9498		
Robert Munnich	1-7-7 SE	424-5378		
Roger Fournier	15-6-7C	326-9498		
Kenn Wall	Box 27	424-5110		
BR	Box 725))))		
FLORENCE Taillefer	Box 202	424-5545		
Thino Queller	Box 67, Marce	429-2133		
Fred Getrod	8 NW 986E	422-5776		
Brad Knudsen	Box 305	424-9685		
Thomas Thorsen	Box 658	381-1646		
Dana Wilson	26 Jeanne Marie	891-1095		
J. Munnich	Box 236 Marce	424-5929		
LIL GAUTHIER	Box 343 DES GARDIENS	424-4016		
Colin Dumonvil	Box 353	392-0403		
Pat Gauthier	78 Waddle Drive	326-7517		
Luce Gauthier	Box 202 LABROQUERIE	424-5545		
Rhona Durand	Box 424 La Broquerie	424-5864		
Gene Johnson	29 Wolf Run La Broquerie W.	346-5408		
Chris Sarsia	Box 566 La Broquerie	380-2569		

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE
 RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Jacqueline Jamin	Box 282 LaB.	424-5167	jackie@lebonum.ca	<i>J. Jamin</i>
Shelley Gobeil	13 Poplar Pl	355-8927	Shelley@lebonum.ca	<i>Shelley G</i>
Bianca Berard	Box 811 LaB.	392-9068		<i>Bianca Berard</i>
Richard Havel	Box 58 LaB	424-5626		<i>Richard Havel</i>
STACEY SEIBER	Box 84 LaB	424-4038		<i>Stacey Seiber</i>
<i>[Signature]</i>	Box 944	424-4040		<i>[Signature]</i>
<i>[Signature]</i>	Box 202	371-3317		<i>[Signature]</i>
Debby Haub	Box 644	424-9558		<i>Debby Haub</i>
Paul [unclear]	Box 213/1	371-0557		<i>Paul [unclear]</i>
M. Sordillo	Box 84 LaB	424-4038		<i>M. Sordillo</i>
<i>[Signature]</i>	Box 22 LaB	424-5566		<i>[Signature]</i>
Hilary Holmes	Box 108 Marchand	424-9698	hilaryholmes@yahoo.ca	<i>Hilary Holmes</i>
Jean Gagnon	Box 224 LaB	424-5081		<i>Jean Gagnon</i>
Kath Berard	Box 811 LaB	424-9926		<i>Kath Berard</i>
<i>[Signature]</i>	Box 520 LaB	424-5025		<i>[Signature]</i>
Ari KLASSEN	Box 1037	424-9519		<i>Ari Klassen</i>
H. Foltz	R5 C. 105	424-9168		<i>H. Foltz</i>
M. Lorschlein	Box 21 LaB	424-6902		<i>M. Lorschlein</i>

Against Manitoba Hydro's
Route 208

Co. 216 105

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Rene Dandette	Box 17 La Broquerie	424-5407		Rene Dandette
Fabrice Luke Goumier	Box 432 Labroquerie	424 4084		Fabrice Goumier
Roger Tailleux	Box 322 La Bro	424-5459		Roger Tailleux
Alex Werner	Box 692 La Bro	424-5778		Alex
André Gueret	Box 1003 Lab	204-392-3153		AG
DIANA BOURQUEOIS	Box 155 LAB	204-424-5601		D. Bourgeois
Sarah Tonn	Box 1009 Lab	807-0638		Sarah
Tomy Belisle	Box 301 Rivier	422-8581		Tomy Belisle
Norm Lavack		424-9986		Norm
Joelle Neufeld	La Broquerie West R046 PTH52	326-5949		Joelle Neufeld
Brigitte Tailleux	Box 246 Labro	791-2209		Brigitte Tailleux
L. Sodering	Box 198 La Bro			L. Sodering
Victor Gerrier	Box 190 La Brog	424-5953		Victor Gerrier
Jules Lalley	LAB			Jules
EMILY HERBERT	Box 267 LABROQ	424-5753		Emily
Pan Schuck	Box 51 Marchand	380-3205		Pan
Ken Dandevan	Box 71 Labroquerie	793-4989		Ken
Karen Marsh	Box 638 LABROQUERIE	424-5676		Karen
Michel Tetrault	Box 414 La Broquerie	381-6581		Michel
Hette Chartrier	Box 333 La Broquerie			Hette Chartrier
BERNARD TAILLEUX	Box 7 La Broquerie	424-5693		Bernard
ALWIDMER	Box 77 Marchand	424-9552		Alwidmer
Büschbeck	Box 47 Marchand			Büschbeck
José Duha	Box 225 Labroquerie	424-5566		José Duha
Bernard Laurin		424-5317		Bernard

Against Manitoba Hydro's
Route 208

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Marc Gagnon	187 Groulx hab.	424-5708		
Darryl Nardor	215 Gauthier Ln	392-8898		
Paul Brisebois	71 Lead Rd	424-9129		
LES ZALUSKI	37 SARUAD	424-9243		424
BILL GILMOUR	SW 21-6-8E	380-9755		
MARCEL MIREAULT	Box 30 B La Broquerie SE 29-6-8E	424-5214		
G. THEBRIEN	SANDILANDS	429-2116		G. Thérien
Serry Wynchuk	Marchand	424-5402		
Serik Gauthier	La Broquerie	424-4016		
Darron Gate	2 A Ve. faure	299-6919		
William Chapin		424-5171/7		
Yvon T. Fovillard	MARCHAND	424-9466		
Tracy Ouellet	49 P. neuve La Broquerie	424-5028		
Gary Hora	Woodridge	392-6639		
M. SOULARD	La Broquerie	424-4082		M. S.
Nijce Trandean	La Broquerie	424-9688		
Hans Helge	La Broquerie	392-0272		
Richard Kestlin	La Broquerie	792-6438		
Cindy Vandale	La Broquerie	424-9832		
J. Taillefer	La Broquerie	392-3748		
Luc Solicœur	La Broquerie	392-2082		
ROY FRIESEN	STEINBACH	392-5247		
Sebastian Sell	La Broquerie	392-5540		
Jennifer Wajtk.	La Broquerie	424-9022		
Dawn Loh	La Broquerie	460-1497		

Against Manitoba Hydro's
Route 208

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Tasha Woods	Box 578 Lab	408-8607		
Sherry Morgan	17 Rue Lab.	408-8518		
Pascal Tétrault	La Broquerie	580-3394		
Amanda Decelles	La Broquerie 219 ^{Gauthier}	380-3281		
Glen Decelles	219 Gauthier	424-9830		
Mouen sun Kethlun	La Broquerie	424-5056		
Gil Bremond	La Broquerie	392-8588		
Rina Hurter	Woodridge	429-2301		
YVES LAFRENIERE	La Broquerie	424-5218		
Darren Bouchard	La Broquerie	424-5095		
Zachary Bouchard	La Broquerie	392-4569		
Suzelle Potts	" "			
Brian Kyle	" "			
Tracey Tallaire	La Broq.	424-9479		
Kevin Still	Road 43 E	380-9428	kstill3@hotmail.com	
Susay Wollmann	La Broquerie	381-2662		
Rudolf Hausmann	La Broquerie	424-5252		
Jean Gagnon	La Broquerie	424-5081		
LIONEL GAUTHIER	LABROQUERIE	424-5585		
Jonathan White	LA BROQUERIE	424-5769		
ROLAND GAGNON	LA BROQUERIE	424-5370		
Southern King	La Broquerie	424-4022		
COLLEEN COONEY	MARCHANT	204-249-431		
Ena Wiebe	La Broquerie	204-380-3949		
Roxane Dupuis	La Broquerie	204-424-5100		

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Paulette Fournier-Joy	C.P. 321 LA BROQUERIE	526-5092		<i>Paulette Fournier-Joy</i>
Pamela Nichett	CP 132 LABROQUERIE	424-9962		<i>Pamela Nichett</i>
Kayla Proteau	84 rue Simard La Broquerie	424-5870		<i>Kayla Proteau</i>
Margot Plouffe	23 RUE SAVARD LABROQUERIE	404-5525		<i>Margot Plouffe</i>
Melanie Gauthier	CP 152 La Broquerie	392-3425		<i>Melanie Gauthier</i>
Loraine Dhan-Blond	CP 162 La Broquerie MB.	424-5055		<i>Loraine Dhan-Blond</i>
Magritte G. Gagnon	Box 24 Richer, MB. R0B50	422-5793		<i>Magritte G. Gagnon</i>
Christian Poirer	Box 504 La Broquerie	392-2148		<i>Christian Poirer</i>
Melanie Tetreault	CP. 142 La Broquerie	424-5814		<i>Melanie Tetreault</i>
Nicole D'Amour	135 Chem Finnigan Ste-Anne	422-9961		<i>Nicole D'Amour</i>
Jeanne Gagnon	#20 rue Dubé La Broquerie	424-5815		<i>Jeanne Gagnon</i>
Jennifer F. Broesky	CP 89 La Broquerie	424-5882		<i>Jennifer F. Broesky</i>
D. Dumont	CP 368 La Broquerie	424-5166		<i>D. Dumont</i>
André Turanne	CP 603 La Broquerie	424-5942		<i>André Turanne</i>
Christian Turanne	"			<i>Christian Turanne</i>
Angèle Turanne	"	424-5942		<i>Angèle Turanne</i>
D. Blair Morris	La Broquerie	424-5886		<i>D. Blair Morris</i>

PETITION OF MANITOBA-MINNESOTA TRANSMISSION LINE

RM OF LA BROQUERIE OPEN HOUSE RE: MANITOBA-MINNESOTA TRANSMISSION LINE FEBRUARY 2, 2015

NAME	ADDRESS	PHONE	EMAIL	SIGNATURE
Yves Nadeau	17 HABS BAY	424-9962	yernadeau@jollibee.com	
Miguel Dubé	NE 1-7-7E	392-6357	miguel-dube@gmail.com	
CHAD MANTIE	41074 PR303	424-5700	CHAD.MANTIE@mts.ca	
Eddie Monnet	37140 37E	204-392-8066	eddiemonnet@hotmail.com	
Gabriel Lepage	63 Quintro Rd.	422-6686	metalar3@gmail.com	
René Dumesnil	11 Gamache Bay	981-4183	rene.dumesnil@dsfm.mb.ca	
David Nadeau	42133 Rd 34N	371-7813	dnadeau609@shaw.ca	
Alain Vielvaure	7 Desgagné St	371-7997	alainvielvaure@hotmail.com	
Pierre Nadeau	33120 PR.302	371-1637	3711638@mts.ca	
Jason Fontaine	32034 Twin Rivers Rd.	371-1746	Jason.F.Lab@general.com	
Rhéal Gagnon	100 PRINCIPAL ST.	371-6793	rhgagnon@mts.net	
Michael Gagnon	15 Norman Ave Bay	392-6923	michael.gagnon@mts.ca	
Luc Poirion	RM of La Broquerie Public Works Foreman	371-1177	—	
Stephen Shore	La Broquerie	326-3418	—	
Corey Tetraault	98 Funk Dr	326-4900	corey.tetraault@mts.ca	
Phil Therrien	34158 39E	392-5686	—	
ERIC THERRIEN	38138 HWY 52	371-0308	therrien.1991@mts.ca	
Gabrielle Simard-Nadeau	17 HABS BAY	381-9438	gabbysimard@gmail.com	
Gérard Simard	Kokomo Rd	346-5120	gsimard@snj.ca	
Rachael White-Simard	Kokomo Rd	320-9438	raegerse@gmail.com	
Justin Harder	17-141 Reimer Ave Steinhilch	392-2536	—	
DAVID CHABOT	MARCHANT	424-9200	—	
Alex Pitsch	Gagana Bay	392-3200	—	



Rachel Fournier

From: Maurice Gagnon <lr2@mymts.net>
Sent: February-10-15 3:27 PM
To: Rm Of La Broquerie
Subject: Petition

We Maurice, Jordan and Kaitlyn Gagnon, are against the Manitoba Minnesota Transmission Project.

Maurice Gagnon -m-
Jordan Gagnon
Kaitlyn Gagnon

Sent from Samsung Mobile

February 9, 2015

Re: Manitoba Minnesota Transmission Project

To: Manitoba Hydro

From: Alain & Jacqueline Fournier

To whom it may concern:

We would like to voice our concerns regarding the preferred route for the Manitoba Minnesota Transmission Project. This line will be passing within a mile of our home and we are quite concerned about the health risks involved not to mention how it will deface the landscape, cause noise pollution in our neighborhood and affect the value of our property and our neighbours.

I (Alain) have lived in this area all of my life (53 years). My parents and brothers live and work on the farm ½ mile east of our house. We enjoy living in the country and taking our dogs for walks... how peaceful and tranquil it is, but with this line crossing my dad's 300 head century beef farm that could all change. Although I currently am not employed on the farm, I still help out when needed and am hoping to one day buy back into the farm.

Although our house is in the R.M. of Ste. Anne, I went to school in La Broquerie and have many family and friends in this town. Most of my graduating class still live in La Broquerie, have raised their families here and now their grandchildren are making La Broquerie home. We are very proud of this fact. We are concerned that the transmission line route 208 will threaten the growth of our town as it is within a mile from town, the schools, the golf course and new developments in the area.

According to Manitoba Hydro's announcement in the Dawson Dispatch for February 2015, the preferred route being sent for review was based on environmental assessment and **public feedback**. At the public meeting held at La Broquerie Municipal Office on February 2, 2015 the consensus of the people was to have the route 207 be the preferred route. A motion was even passed at the R.M. of La Broquerie on May 14th, 2014 stating that "the R.M. of La Broquerie, on behalf of its citizens, strongly urge Manitoba Hydro to consider route 207 as the logical alternative for the project". We would like to see what public feedback you received in favor of route 208.

We purchase land, pay taxes on it every year and assume the property belongs to us but in reality the government can decide they need it,...want it,...and you have no choice in the matter, they can take it. I thought Canada was a democratic country but this sounds like the actions of a communist country.

We are Manitoba residents, Canadian citizens and are told how important it is for us to vote and that every vote counts. Hopefully our concerns are just as important and that they count also.

Sincerely,

Alain Fournier, Jacqueline Fournier

Alain & Jacqueline Fournier

RM of Ste. Anne
395 Traverse Road
Box 6, Grp 50, RR 1
Ste. Anne, MB R5H 1R1

RECEIVED
FEB 06 2015

February 5, 2015

RM of Ste. Anne council,

Reference to : Manitoba-Minnesota Transmission Project

We are residents of the RM of Ste. Anne and since we live in the south end of that municipality we are also part of the community of LaBroquerie.

We have received a letter from Manitoba Hydro stating that the # 208 transmission line had been chosen as the preferred route. (reference : included map)

This is unacceptable to us because for the following reasons :

- We live on the land parcel SE 7-7-8E which is along the route 208 and the hydro line will pass less than 300 feet from our house (see included picture Exhibit A)
- We are concerned about this line being unsafe and concerned that it poses a risk to our health being so close to our house (*see exhibit B, SAFESPACE - information supplied to us during a meeting on the subject of the # 208 hydro line, held at the RM of La Broquerie , on February 2, 2015*)
- We are in full support of the resolution # 172-14 (Exhibit C) taken from the minutes of the RM of La Broquerie on May 14, 2014 and we quote from the last paragraph : *" Therefore be it resolved that the council of the Rural Municipality of La Broquerie on behalf of its citizens, strongly urge Manitoba Hydro to consider alternative route #207 as the logical alternative for this project"*
- The route # 207 is a better choice, according to us, for these reasons :
 - o There is very little, if any, interference for people living along this line
 - o Human beings should be put first – Manitoba Hydro tends to consider first the costs of clearing a line in the forested area of route #207, but the # 207 poses no health risks to humans or property damage to owned land, therefore we think it should be strongly preferred by Manitoba Hydro

We have been very stressed by Manitoba Hydro's decision to prefer the #208 line considering it is so close to our home. This parcel of 80 acres that we own has been in the Bédard family since 1949 has been passed on from father to son and it is a treasured property.

We are disappointed and disheartened by the decision that Manitoba Hydro has chosen the preferred route # 208 and hope that the RM of Ste. Anne will support the #207 as many people in both the RM of La Broquerie and the RM of Ste. Anne do.

Best regards,

Albert Bédard Monique Bédard
Box 217 La Broquerie MB R0A 0W0

RECEIVED
FEB 06 2015

February 4, 2015

Re: Manitoba Minnesota Transmission Project

To: Manitoba Hydro

From: Bernard, Marge, Renald & Gilles Fournier

To whom it may concern,

We are writing this letter to voice our serious concerns regarding "The Preferred Route" for the Manitoba/Minnesota Transmission Project. We own a century farm which has been in the family since 1899 (116 years). By the maps we received from Manitoba Hydro the transmission line will be crossing the property not very far from the heritage site (approximately 400 feet). We still have a 300 head beef cattle farm and are quite concerned about the effects that this line will have on us, our health as well as the cattle that we put in that field to pasture in the summer. During the winter the cattle are kept in a fenced-in area close to the house which is the same approximate 400 ft distance to the lines.

From our research on the internet on the "safespaceprotection.com" website under the heading of "Electric fields , Magnetic Fields and power lines are a Health Hazard" it states the side effects of magnetic fields and the pollution from living near these types of power lines increases your risk of cancer and other health problems. "The electric fields can easily be shielded but the magnetic fields can penetrate stone, steel, & human flesh. In fact when it comes to magnetic fields human flesh and bone has the same penetrability as air." We find that quite concerning.

This transmission line will also be going through prime agricultural land, ours as well as our neighbours not to mention how it appears basically in our back yard so to speak.

In reference to "What we heard - round 1" on the MMTP site, one of the concerns voiced, specifically talks to the "Centennial Farm issue and the response was ..." they are avoided where possible." In that same round of concerns it was also stated that the "alternative routes utilize paralleling options where possible";... "location of urban centres and residential areas are a major consideration in refining routes";... "Proximity to individual residences and farmsteads are a major consideration in transmission line routing. Transmission line corridors avoid residences to the greatest extent possible."

Based on your own words, we find that there is absolutely no reason for putting the transmission line on route 208 which is the preferred route instead of having it on route 207 where it would avoid a Centennial Farm as well it would be utilizing paralleling lines and avoid close proximity to many new homes as well as the newer developments to the town of La Broquerie. The 207 is the most logical route where it will affect less people, agricultural land and will be less disruptive on peoples lives.

We hope our concerns are taken seriously.

Sincerely,

Bernard Fournier
on behalf of Marge, Renald and Gilles Fournier

Rachel Fournier

From: Jennifer Blatz <cao@rmofsteanne.com>
Sent: February-13-15 10:34 AM
To: 'Rachel Fournier'
Subject: Transmission Line
Attachments: Ste Anne.pdf

Hi Rachel,

Offhand, our Council feels exactly the same as yours. Manitoba Hydro attended our meeting on the same day and Council was adamant that they go back to the drawing board with the preferred route.

I wish that I had received this email on Wednesday or I would've asked them! Maybe I'll talk to the Reeve and see if they mind if I just write a letter of support anyway, as they obviously do support the RM of La Broquerie on this matter.

I will let you know as soon as possible...

*Jennifer Blatz, CMMA
Chief Administrative Officer
RM of Ste. Anne
395 Traverse Road
Box 6 Grp 50 RR 1
Ste. Anne, MB R5H 1R1
Phone (204)422-5929
Fax (204)422-9723
cao@rmofsteanne.com*

From: Tiana Bohemier [<mailto:info@rmofsteanne.com>]
Sent: February-12-15 3:19 PM
To: cao@rmofsteanne.com
Subject: FW: Transmission Line

From: Rachel Fournier [<mailto:rfournier@rmlabroquerie.ca>]
Sent: February-12-15 3:13 PM
To: info@rmofsteanne.com
Subject: Transmission Line

Please find attached a letter on behalf of the council of La Broquerie.
Original to follow in mail.

Regards,

Rachel Fournier, CMAA

Assistant Chief Administrative Officer
Rural Municipality of La Broquerie
Secretary Treasurer
La Broquerie Arena
123 Simard Street
P.O. Box 130
La Broquerie, MB R0A 0W0
Tel: 204-424-5251
Fax: 204-424-5193

The information contained in this communication is confidential and intended only for the use of those to whom it is addressed. If you have received this communication in error, please notify me and destroy any copies of it.



Home | EMF Protection Products | Technology & Testing | At-a-Glance Guide

To Order Call 866-821-8122

What is EMF?

EMF Health Effects

KNOW YOUR EMF HEALTH RISKS

Cell Phones & EMF Health Hazards

Wireless Routers Emit EMF

Cell Towers Are EMF to the Extreme

Computers & Monitor EMF

Geopathic Stress & EMF Fields

Appliances Emit EMF

Microwave Ovens & EMF Radiation

Power Lines, EMF & Cancer

Water Lines Carry EMF

Cars, Travel & EMF on the Road

CHOOSE PRODUCTS TO PROTECT YOU

SafeSpace Solutions

RESOURCES & INFORMATION

Technology & Testing

Understanding Our Technology

Testing Our EMF Products

SafeSpace EMF Research Papers

EMF Q&A

EMF Protection Testimonials

EMF News & Info

Healthy Tips

*Reene
Fabroque*

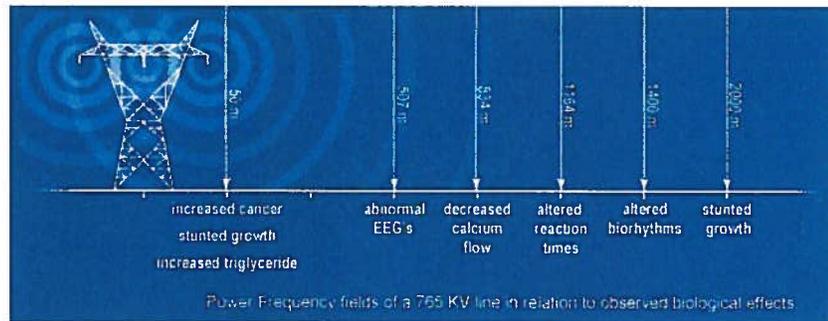
EMF Pollution from Living Near Power Lines - Solved?

Power lines and electrical poles have become so common on the landscape, they are virtually invisible. But it's worth taking a hard look at them. **Are you living near power lines?** What is that barrel-shaped device on the electric pole and is it harmful? Did you grow up near a high-voltage power line?

Is there a safe living distance from or to power lines?

Experts say as far as possible ... Hundreds of studies worldwide have shown that living next to high voltage power lines and other parts of the power transmission network increases your risk of cancer and other health problems.

We'll examine those risks below, and the recommended SafeSpace solutions designed to minimize and eliminate the health risks.



Safe Living Distance To Power Lines?

Is It Harmful To Sit Under Power Lines?

Absolutely possible. It depends on how powerful are the EMFs coming from your neighborhood power lines? The electrical power grid uses a "step down" system of distribution, highest near the generating station and substations, lowest at the end. The closer you are the more you are bombarded with dangerous EMFs.

Living Under Power Lines? Some Facts You Should Know

High voltage transmission lines (those towering metal power lines you often see usually along highways and across rural landscapes. Some folks, unfortunately are under them.):

- Use high voltage direct current (HVDC) to transmit large amounts of power from the generating station over long distances
- Voltage varies from 138kV to 765kV
- Radiate powerful electromagnetic fields (EMFs)
- Linked to diseases in animals and humans
- There is growing speculation that the values of homes near major power lines will soon begin to decrease because of this threat

Transmission substations, (which often look like a fenced-in thicket of metal structures. Maybe you see one near your home, school or office.):

- Contain circuit breakers, switches and transformers
- Decrease the voltage coming from high voltage transmission lines
- Connect to local, lower voltage distribution lines.
- Reroute power to lines that serve local markets
- Suspected cause of cancer clusters for nearby residents

Lower voltage distribution lines, (or local power poles, which are everywhere):

- Are smaller than the huge high voltage lines
- More likely to be seen in residential areas
- Sometimes buried
- Risk varies with strength of voltage

Transformers, (those barrel-like metal trashcans mounted on power poles are EMF factories.):

- Reduces the voltage to the 120-/240 current needed by the nearby homes
- The typical power line feeding the transformer is carrying 4000 to 13,000 volts
- Creates a strong field extending up to a 1/4 of a mile
- The strength of this field decreases significantly with distance (the further away you are the better, even if you are still within a quarter mile)
- Health risk depends on strength of incoming power line

Buried lines and transformers (Recognizable by a metal box located on the ground near the street.):

- Some people contend that burying power lines can mitigate EMF dangers.
- Other experts note that while burying power lines will shield the electric component of the electromagnetic field (EMF), the magnetic component can still pass through the earth—and walls and human bodies.

Electric Fields, Magnetic Fields & Power Lines are a Health Hazard!

There is no question that power transmission apparatus emit electromagnetic fields (EMFs).

An EMF is not just one thing, but two kinds of fields:

- **Electrical field:** the part of the EMF that can easily be shielded.
- **Magnetic field:** part of the EMF that can penetrate stone, steel and human flesh. In fact, when it comes to magnetic fields, human flesh and bone has the same penetrability as air!
- **Both fields are invisible and perfectly silent:** if you live in an area with electric power, cell phone service, water pipes and more, some level of artificial EMF is surrounding you.

Living Close to Power Lines and How EMFs Harm Human Health

Your body acts like an energy wave broadcaster and receiver, incorporating and responding to EMFs. In fact, scientific research has demonstrated that every cell in your body may have its own EMF, helping to regulate important functions and keep you healthy.

Strong, artificial EMFs like those from power lines can scramble and interfere with your body's natural EMF, harming everything from your sleep cycles and stress levels to your immune response and DNA!

Studies Show Living Next To Power Lines Increases The Risk Of Cancer

After hundreds of international studies, the evidence linking EMFs to cancers and other health problems is loud and clear. High Voltage power lines are the most obvious and dangerous culprits, but the same EMFs exist in gradually decreasing levels all along the grid, from substations to transformers to homes.

From the British Medical Journal, June, 2005:

Researchers found that children living within 650 feet of power lines had a 70% greater risk for leukemia than children living 2,000 feet away or more.

From Epidemiology, 2003 Jul;14(4):413-9:

"Several studies have identified occupational exposure to extremely low-frequency electromagnetic fields (EMF) as a potential risk factor for neurodegenerative disease."

From Epidemiology, 2002 Jan;13(1):9-20

There is "strong prospective evidence that prenatal maximum magnetic field exposure above a certain level (possibly around 16 mG) may be associated with miscarriage risk."

From the Internal Medicine Journal, 2007

In a study of 850 lymphoma, leukemia and related conditions, researchers from the University of Tasmania and Britain's Bristol University found that living for a prolonged period near high-voltage power lines increased the risk for these conditions later in life.

- People who lived within 328 yards of a power line up to age 5 were five times more likely to develop cancer as an adult.
- People who lived within 328 yards of a power line at any point up to age 15 years were three times more likely to develop cancer as an adult.

Dr. David Carpenter, Dean of the School of Public Health (SUNY), believes that up to 30% of all childhood cancers come from exposure to high voltage power lines.

Even the Environmental Protection Agency (EPA) cautions citizens that "There is reason for concern" and advises "prudent avoidance" of high voltage power lines.

The California Department of Health concluded that EMFs were responsible for an increase in childhood leukemia, adult brain cancer, Lou Gehrig's disease and miscarriage in the 2002 report, "An Evaluation of the Possible Risks From Electric and Magnetic Fields (EMFs) From Power Lines, Internal Wiring, Electrical Occupations and Appliances."

The studies cited above and dozens of other epidemiological studies specifically link high voltage power lines with:

- Brain tumors
- Leukemia
- Birth defects
- Lymphoma

Electromagnetic Radiation and Power Lines. It's a Problem.

According to research and publications put out by the World Health Organization (WHO), EMF such as those from power lines, can also cause:

- Headaches
- Fatigue
- Anxiety
- Insomnia
- Prickling and/or burning skin
- Rashes
- Muscle pain

You Need EMF Shielding From Electrical Power Lines & Transformers!

High voltage power lines, and radiation are something that can affect urban and rural communities alike. In truth, few residential areas escape this threat. For now, it's critical to understand your risk of living close to power lines and how protect the area around you.

SafeSpace: Technologies To Treat And Transform Harmful EMFs

Over years of research and testing, we've developed proven technologies specifically developed to interact with and transform even the more powerful EMFs. (See independent laboratory testing.)

Our devices are imprinted with proprietary patterns (coded information) that literally influence artificial electromagnetic fields. When this information is added to a harmful wavelength, that wavelength is transformed to a benign, even positive influence on biological life it surrounds.

Frequently Asked Questions About This Section

Read our Frequently Asked Questions about these Products.

[Home](#)

[About SafeSpace](#)

[Dealers](#)

[Policies](#)

[Contact Us](#)

[Site Map](#)

© Copyright 2013, Dimensional Design Products Inc, All Rights Reserved.



.. OPINIONS PEOPLE YOUR PRACTICE MED STUDENTS ARCHIVE CLASSIFIEDS

Home >> Back to the November 2008 Issue

Is living near power lines bad for our health?

Issue: BCMJ, Vol. 50, No. 9, November 2008, page(s) 494 BC Centre for Disease Control

Ray Copes, MD, FRCPC, Prabjit Barn, MSc

The debate of whether there are adverse effects associated with electromagnetic fields from living close to high-voltage power lines has raged for years. While research indicates that large risks are not present, the possibility of a relatively small risk cannot be conclusively excluded.

Electromagnetic fields (EMFs) are produced by electrical appliances, electrical wiring, and power lines, and everyone is exposed to them at some level. Numerous studies have investigated EMF exposure and health. Although earlier studies did suggest associations between exposure and a variety of health effects including brain cancer, breast cancer, cardiovascular disease, and reproductive and developmental disorders, most of these associations have not been substantiated by more recent research. One notable exception to this is the association with childhood leukemia, which the International Agency for Research on Cancer regards as sufficiently well established to rate extremely low frequency magnetic fields as a "possible" human carcinogen.[1]

The first study to link childhood leukemia with residential EMF exposure was published in 1979[2] and since then, a number of studies have found weak associations to support this original finding. Studies investigating childhood leukemia as a health outcome of EMF exposure have used measured and calculated magnetic fields, as well as distance of homes to power lines, as an exposure measure. Studies using magnetic field strength as an exposure measure have found that exposures greater than the range of 0.3 to 0.4 μ T lead to a doubling risk of leukemia, with very little risk below this level. This exposure range is approximately equal to a distance of 60 m within a high-voltage power line of 500 kV.

However, a more recent study showed an elevated risk of leukemia among children living in homes with distances much greater than 60 m from high voltage power lines.[3] This study involved close to 30000 matched case-control pairs of children living in the United Kingdom. It was found that children living in homes as far as 600 m from power lines had an elevated risk of leukemia. An increased risk of 69% for leukemia was found for children living within 200 m of power lines while an increased risk of 23% was found for children living within 200 to 600 m of the lines.[3] This study was notable in that it found some elevation of risk at much greater distances than previous studies.

Although distance of homes from power lines can be considered a crude measure of exposure, the results of this study do merit attention. A limited understanding exists of how exposure to EMF can affect health. The underlying biological mechanism is unknown, making it difficult to determine which measure of EMF is most appropriate when evaluating health outcomes. Use of residential proximity may be a reasonable surrogate for direct measurements of EMF, but may also reflect other factors that are related to proximity to high voltage lines.

If the association found in the UK study does reflect a causal relationship, what are the potential impacts in BC? Using current BC leukemia rates[4] and assuming similar proportions of the population live near high voltage lines, on a statistical basis, there may be one additional leukemia in BC every 2 years. To eliminate this risk, one would need to achieve a separation distance of 600 m between every high voltage power line and the nearest residence. While this could be done, it would require substantial changes to existing land use patterns and would require significant resources. While it can be argued that this action is consistent with some forms of the precautionary principle, based on best available evidence, one can achieve much greater risk reduction or health benefits if resources are directed to other larger, better established risks.

Appendix E

E1 – Stakeholder Group and
Landowner Meeting Minutes

E2 – Comment Sheet Data

E3 – Online Comment Sheet
Data

E4 – Landowner Form Data

E5 – Mapping Data

E6 – Email and Telephone
Summary

Appendix E

E1 – Stakeholder Group and
Landowner Meeting Minutes

E2 – Comment Sheet Data

E3 – Online Comment Sheet
Data

E4 – Landowner Form Data

E5 – Mapping Data

E6 – Email and Telephone
Summary

Online Comment Sheet Data

Do you visit or use areas near PR?		Do you have any concerns or recommendations about the Preferred Route? If so, please fill in the following table using the example below.						
1. Yes/No	If yes, please describe:	2. Concern (A)	Mitigation (A)	Location (A)	Additional Concerns/Impacts?	Concern (B)	Mitigation (B)	Location (B)
1	Yes				No			
2	Yes	Route crossing road 30N cuts through our land, which we use for harvesting landscape trees and firewood for the winter. We also use the land for recreational purposes such as hunting, and sightseeing.						
3	Yes	We do a daily walk along the wooded area by the river from my place of residence. Also looks like it could be an eye sore from my place of residence.	Lines are running close to my neighbours property and would be an eye sore to our natural view. May also affect my property value.	Move the route approx. 1000 feet southeast of proposed route towards flood way dike.				
4	Yes	live next to it, within half a mile	Is it true that these lines could cause health issues?		*QS Provided*	Is there noise issues		ne-4-10-4-e
5	Yes	La Broquerie	Cancer/ EMF pollution	The route need to be moved east more into non populated area	*QS Provided*			
6	Yes	South floodway gates bicycling, hiking, walks	The route is beside land that is public space	The route could be moved 200 ft further south				
7	Yes	recreational use of the floodway						
8	Yes	living location is near proposed line	line is crossing in front of house	move to the east side of the propvince		health for people and environment	move to east side	south winnipeg
9	Yes	south of La Broquerie, cabin, camping, tree farm on so called preferred route	the route is crossing through our tree farm, a managed woodlot	use route 208.	*QS Provided*	concern for the town of La Broquerie, route practically passes through town	find alternate route	Village of La Broquerie
10	Yes	i live less than 800m from the proposed line	the route is crossing right through current and residential and future development areas less than 1 mile form the town of La Broquerie. This impacts 3 schools and the most densely populated community in the entire proposed route. While the alternative route was proposed through uninhabited crownland for the most part. Where the impact to humans would be minimal.	the route could be on the proposed segment 207 instead of segment 208. this would circumvent residences, agricultural operations and reduce the risks, as low as they may be, to human health.				
11	Yes	I live next door	The line will be right beside my house. I'm concerned for my child's health due to these lines. I'm also concerned these lines will take away from my property's value. I am also concern it will affect our cell service. The constant buzzing will also take away from the serenity of living in the country.	The other route could affect less people. It's not necessary to go trough the town of La Broquerie.				
12	Yes	Nature walks every day. Great scenery and wildlife.	Impact wildlife migration and scenery with the huge cut line of trees for the project. Also the noise from the lines given the weather conditions.	You could minimize the impact by moving the corridor approx. 300 meters southeast of original location.		Because of the amount of tree line being cut it would affect bird activity and wildlife. Bald eagles,hawks,falcons, humming birds,orioles,blue jays, owls not to mention bears,coyotes,deer, minks,beavers,foxes,bobcat,rabbits, raccoons,etc.	Relocate the corridor to minimize amount of trees to cut for project.	Area beside City of Winnipeg tree nursery.
13	Yes	daughter's school in town of LaBroquerie						
14	Yes	Two of my sons and their families live on Quintro Road. Spend a lot of time visiting, sitting outside when it's nice, playing games outside. Enjoying family time out of town in a nice quiet area.	The towers will be in the backyards of two of my sons and their families. Who wants to live with towers, the constant noise, possibility of health hazards, seeing that whenever you look out the window, etc. in their yards. How can you impose this on any landowner?	Choosing the alternate more easterly route 207		HEALTH - radiation from power lines for residents living nearby the towers, children and employees in the two schools . There is insufficient evidence that there are no health issues. I have read that radiation from power lines is dangerous for humans up to 2 kms in range. Humans are being impacted.	Don't put up towers nearby residents' homes and schools. Don't go through residents' yards. Choosing the more easterly route 207, I believe that there will be less human impact.	Along route 208 in the R.M. of La Broquerie, backyards of residents, farmers' agricultural fields.
15	Yes	I own the top right quarter section of NE 2-9-7 W (right where the line will be going!) and intend to build a house in the next year. There is numerous wildlife in this area, including families of deer, beaver and birds.	The buit up plot on the property is facing right where the proposed line will go and looks to be located less then 200 yards from the building site. It will also be going right through a marsh on the property which will affect the whole delicate ecosystem in that area.	This line should not be going this land as it will disrupt the ecosystem and force numerous species to relocate. This needs to be move much further away from the property line where there may also be livestock and farming.	*QS Provided*	Large numbers of white tailed deer live and bed in the that marshland and this affect their population incredibly. I have numerous trail cam pics and video's of these animals. Also there are huge health effects that these poles have on humans. These poles will be less then 200 ft from my bedroom.	Do NOT BUILD ON THIS LAND!	NE 2-9-7W (NE corner)

Online Comment Sheet Data

Do you visit or use areas near PR?		Do you have any concerns or recommendations about the Preferred Route? If so, please fill in the following table using the example below.							
1. Yes/No	If yes, please describe:	2. Concern (A)	Mitigation (A)	Location (A)	Additional Concerns/Impacts?	Concern (B)	Mitigation (B)	Location (B)	
16	Yes	I am a resident of La broquerie, and I have family & freinds that live in the areas near the preferred route. I also am a member at the local Golf course and play golf on a regular basis near the preferred route.	The towers will be in the backyards of some of my family members. Who have expressed that they do not which to live with towers, the constant noise, possibility of health hazards, seeing that whenever you look out the window, etc. in their yards?	I feel 200 ft further east is not an acceptable solution. I would rather think that a second alternate route #					
				The stretch of line from north of La broquerie to south of La Broquerie	Yes	HEALTH – radiation from power lines for residents living nearby the tower, children and employees from the two schools. There is insufficient evidence that there are no health issues. I have read that radiation from power lines is dangerous for humans up to 2 kms in range. I believe that the property value of any resident that have towers in their yard will definitely go down. Resale of their property will be almost impossible. Who wants to live with towers, the constant noise, possible interruption of cellular and internet service, possibility of health hazards, seeing that whenever you look out the window, etc. in their yards. How can you impose this on any landowner?	Chose alternate route #207. Don't go through residents' yards. Choosing the more easterly route 207, I believe that there will be less human impact.	Estearn edge of the Town of La Broquerie	
17	Yes	Our issue (there are 5 of us in this household) is with the LaBroquerie area. There are schools and countless houses and farms that will be effected by this line. The 207 line could have been easily chosen instead and would not have effected nearly as many people's health and private properties and livestock. Wild animals have the opportunity to walk away from harmful EMF's and make new homes for themselves while livestock are stuck in barns 24/7, children have to attend schools 8 hours a day and people live in their homes that are unmovable. All of these will be getting radiation from your towers constantly. Comparing the EMF's to a microwave is laughable. Microwaves are not in constant use. You can shut them off. YOU CANNOT SHUT OFF AN ELECTRICAL TOWER. It is CONSTANTLY radiating powerful EMF's wether your going to acknowledge it or not.	The route will be crossing many peoples private properties and countless farms that will all be negatively effected by this line, not only by creating a dangerous living environment but also will ruin property value. We all moved to the country in order to get AWAY from such huge metal structures and to have only nature and pastures surrounding us.	Bring back the 207 line so that it is on crown land, not private property. Away from schools, further away from private properties. It would benefit everyone living here if there was a cut line through the forest to aid as a forest fire prevention. It would save all houses in marchand and protect the ecological reserve if there were another forest fire like we had 3 years ago that nearly destroyed everything.					
				The entire surrounding area of LaBroquerie and Marchand	Yes	I am concerned about the fact that you spray herbicides (such as agent orange which is known to cause cancer) surrounding the line which will be going through peoples private properties, another adverse health effect on humans.	Construct the line AWAY from peoples properties and on crown land so the dangerous chemicals that you use to kill the plants surrounding the line are only used in non-dwelling areas. Such as line 207 would have been.	All of LaBroquerie and Marchand	
18	Yes	I live within 100 m of route							
19	Yes	Medicinal, Traditional hunting grounds, Golfing, Hiking, Canoeing, Kayaking, Cell phone, Farming, Bio Security areas, Flying, Crop Dusting, Kite Flying, etc.							
20	Yes	my daughter's school is located in the town of LaBroquerie	The route is too close to the schools in LaBroquerie	Please move the route further from the town and the school, for the route to be at least 2 miles from the school.	town of LaBroquerie	Yes	I am concerned that this will impact the town of LaBroquerie's economic growth	Move the route further from the town.	town of LaBroquerie
21	Yes	it runs through my property							
22	Yes	Hiking, Hunting, Biking, Running	The route is destroying natural forest areas, home to many deer. There is not a lot of trees and the river section of this route will remove a large swath of the remaining treed areas along the river where people hunt, fish and geocache.	Erect towers without destroying or clearing trees. Move the route to a more western route that is already open.	Crossing at Roblin Blvd in Headingley	No			
23	No		Stay off of farm land!						
24	Yes	I live within 160m and my children go to school with a mile of the new line! We do all of our activities and day to day things, banking, shopping, work, etc. in La Broquerie							
25	Yes	on my land							
26	Yes	live here	route is crossing land very close to our house	use the other route that was supposed to be used down fire guard 13	near la broquerie golf course	No			
27	Yes	Residence							
28	No					No			
29	Yes	property owner,property adjacent to affected properties. 36-8-7e lots 1and3	the route is crossing land that is open and in full view of lot 3/ concern is deflated property value	compensate affected owners more fairly. The affected properties will lose as much as 30%of their current value	*QS Provided*	No			

Online Comment Sheet Data

Do you visit or use areas near PR?		Do you have any concerns or recommendations about the Preferred Route? If so, please fill in the following table using the example below.							
1. Yes/No	If yes, please describe:	2. Concern (A)	Mitigation (A)	Location (A)	Additional Concerns/Impacts?	Concern (B)	Mitigation (B)	Location (B)	
30	Yes	We live right down main street in Ste. Genevieve, in the vicinity of both your proposed lines going around our town. We travel to all the other towns along the route, for work and to visit family and friends.	The route is crossing land just south of our town, and just west of town as well. We'd be boxed in, between both lines. We live about one km north, and 2 kms east of the respective lines. VERY concerned about how these will impact our landscape, our health, our property values, the community spirit and the viability of our community.	Find a more direct north-south route to the States, instead of circumventing all of our beautiful, historical little towns in eastern Manitoba. Go far, far, away from human settlements, please!	The town area of Ste. Genevieve, all of the Eastern Highland area of southeastern Manitoba, all of the beautiful, historic towns located along the route in southeastern Manitoba.	Yes	I am concerned about the health of people and wildlife. If these lines can have a negative impact on pipelines in the ground, there is no doubt that above-ground impacts are undeniable.	Bigger and more are not necessarily the best thing. Why not size things according to the way it impacts living beings. The preferred measure is the human scale.	Anywhere there is human life, or life that could be hurt by corporate ambition.
31	Yes	I live very close to YOUR preferred route	The view from many of my house windows will be transmission lines and towers	move it to an area away form the city of Winnipeg	South end of City Of Winnipeg	Yes	I am concerned about my childrens health	A transmission line of this size should not be constructed near large cities	Winnipeg south
32	Yes	live nearby	less land is available in the RM to subdivide; tax base does not increase as much as possible; value of neighbours land decreases and will affect our values	move route to crown land to the east and not on private landowners properties	*QS Provided*	Yes	trespassers and vandalism in the area; fire could start and could affect all the forest and swamp areas around our neighbours and ourselves	move on to crown land to the east and off private landowners properties	SE 2 9 7 E
33	Yes	home is located very very close by	the route 208 is passing less than 500 feet from my house	you can choose the 207 route instead	*QS Provided*	Yes	we are very concerned for our health being so close to the line	simply chose the 207 route	SE 7-7-8E
34	Yes	landowner	destroying conservation land & threatening wildlife	the route could be moved further east to avoid excessive destruction of treed property i.e. off the ridge	*QS Provided*	Yes	the are protectcted species i.e porcupines resident in the forest under threat	move line east to marsh area, off of ridge & out of forest	NW 25-2-9E
35	Yes	LIVE on the preferred route							
36	No					No			
37	Yes	LaVerandrye Golf/Hwy. 210 to Marchand	Cheaper route using existing public land and following an existing route	See Above		Yes			
38	Yes	I visit the property to get away from the City to enjoy nature and what is has to offer.							
39	Yes	recreation							
40	Yes	I have family that live right were it is to be set up	The route is right where my family lives.						
41	No					Yes			
42	Yes	Visiting friends							
43	Yes	My family and I live 160 meters from the suggested lined. Live and breath! It's crazy to think that we would have ever chosen to build this close to the lines. We built our dream home on the golf course, close to the river and Town and Now we have this to deal with.	160 meters away	move it on the other proposed line that isn't next door to houses or don't build it!	*Address Provided*	No			
44	No					No			
45	Yes	My land parcel that I live on is being crossed by the line	Potential health concerns. Subdivision concerns. Decrease value of property. Ugly. Disturbing a natural feeding ground for the deer and other wildlife as the line will be passing near a natural pond in the bush	By moving it with the other line on crown land or better yet don't build this line at all so us manitoba hydro customers that live in manitoba do not have to suffer rate increases	*QS Provided*	Yes			

Online Comment Sheet Data

Do you visit or use areas near PR?		Do you have any concerns or recommendations about the Preferred Route? If so, please fill in the following table using the example below.							
1. Yes/No	If yes, please describe:	2. Concern (A)	Mitigation (A)	Location (A)	Additional Concerns/Impacts?	Concern (B)	Mitigation (B)	Location (B)	
46	Yes	We run and cycle along the roads	My concern is that there is a hydro line already running almost beside the proposed route. Land is already cleared for that existing route. Why does Hydro have to clear and build yet another route? why not build beside the existing route or increase the "power" of the existing route? Then you would not be having upset land and home owners.	Construct the proposed line to go south along Hwy 12, already farm land, no clear cutting required. The run it along hwy # 1, on more farm field, no one would care if hydro lines run along the hwy, then at SE24 87E, it can bend as you have currently shown, if no one else is objecting. Use existing cleared land, As you do when the proposed line meets up with existing at SW 25 6 7 E. Hydro cannot state it wants a more direct route since Hydro's bipole 3 's consists of great and wide m eanderings.	The area where the new proposed route diverges from the existing hydro line up to the point where it meets and runs along the existing power line	Yes	I object to Hydro ramping up the power supply in Minnesota beyond what they want and then charging the Manitoba rate payers on the idea that perhaps, maybe, in the future other states will want to buy Hydro from us.	Build along existing power lines so you don't disrupt existing ecosystems in the proposed areas.	As stated prior, where the proposed line diverges from the existing line, up to the point where the proposed line DOES converge and then follow the existing line
47	Yes	I live and drove past	many- will devalue our property, wildlife concerns, other environmental and personal impacts with no real benefits for those in our province or area	Its cost and impact should be considered as its a very stupid, shortsighted idea	All of it	Yes	Wildlife, plants and people	Stop the thing	All of it
48	Yes	I live here	The route is less than one mile away from my property.	The route can be moved a 5 miles farther east of La Broquerie.		No			
49	Yes	travel							
50	Yes	we live within 1/2 mile. We also use our land to generate vegetable crop and hunt on to help sustain ourselves. There is wildlife and wild berries on the property as well as the seine river. Our children attend school, and play sports in town which is also less than a mile from the line.							
51	Yes	We will pass under the proposed line every day							
52	Yes	my house is located 600 meters to preferred route	the route is coming into our community, close to two schools a care home a golf course and my property	this lline should be moved away from our community	*QS Provided*	Yes	I am concerned for the community of La Broquerie	move the line out of our community	La Broquerie
53	Yes	Ingolf Ontario							
54	Yes		cuts through south west corner of my property	I'd prefer to see route follow the west property line	49.092-96.168	Yes	consumes untouched wooded acres	re route to west side of property line	49.092-96.168
55	Yes	We reside within 5 miles of the route near Ste Genevieve	Impact is low	Continue open and transparent communication		No			
56	Yes	We live a few milles from the route and would cross it very often.				No			
57	Yes	Too many residents from Richer south, all the way to Marchand. There is an existing hydro line going through that area, West yet. Why could this not be added to existing? Few to nil residents in Reynolds & Piney area: could this not be looked into further?	Close to my area; am concerned for other residents as well.	Should be in Reynolds & Piney RM instead.	Too close to town in La Broquerie.	No			
58	Yes	Farming	Line is crossing land rented for cropping and also passes very close to home	Line could be moved further east to Reynolds RM and crown land	*QS Provided*	Yes	Your concerned more with wild life than humans	Move line	NW 32-9-7E
59	Yes	Town of Ste. Anne resident							
60	No					No			

Online Comment Sheet Data

Do you visit or use areas near PR?		Do you have any concerns or recommendations about the Preferred Route? If so, please fill in the following table using the example below.							
1. Yes/No	If yes, please describe:	2. Concern (A)	Mitigation (A)	Location (A)	Additional Concerns/Impacts?	Concern (B)	Mitigation (B)	Location (B)	
61					Yes				
62	Yes	reck & gamen management area							
63	Yes	My house is approx. 200 metres away	The route is too close to my home. I am concerned for the health of my family including 3 kids	You could use the other suggested route not as near the town of La Broquerie					
64	Yes	La Broquerie - my parents' residence							
65	Yes	I live less than 400 yards from the line	It goes across the back of my property. I'm not convinced that the exposure is safe for families. The lines are 24 hour exposure and the numbers and comparisons given are hair driers which are used for twenty minutes a day. It also will further impede or view out of our property.	The route should be underground. It's costing a lot of money to complete this project and a bit more wouldn't impact it as much. If hydro offered to purchase property from folks impacted (exposure, view, depreciation of property)	*Address Provided*	Yes	The project is already in the works and I have been told nothing I say will change the plan. I was told I would receive a phone call regarding my concerns my the representative at the forum and I have received no such call.	Phone me when I'm told I will be phoned. Also provide a signed letter stating there are zero effects of our exposure.	West of wescana.
66	No				Yes				
67	Yes	area where line is proposed to cross the border				Yes			
68	Yes	i hunt, trap and live on the preferred route	the route is on the property i live on	make sure that access to the public is denied with physical barriers at every property live		Yes	i am concered that the access created onto private property with be utilized by ORV's and snowmobiles causing trespassing concerns. i also have planted trees all over my property that may be in the path of the new line.	give me exact location of the line for my property so i can relocate trees,	every where the line crosses privately owned land
69	No	we live right next to a previously contemplated route				No			
70			the route crosses land that is open, and in clear view of my kitchen/dining room windows, and in close proximity to my firepit area	stay off of my land/go across public land					
71	No					No			
72	Yes	yes i live...	The route is opening up land to trespassing, fires, quads, hunting, herbicides	The route can be moved further East where it does not run right through a community or moved west down the #1 hwy where it minimizes the impact on property owners.		Yes	The burden of billions of dollars in construction costs for all these power lines when they are not needed for Manitobans. If it was to keep our electrical costs minimal i could understand better but having our rates almost double in the next 10 years does not make sense if you are selling all this amazing power to pay for this. Originally we were not on the hook for any \$ and now millions-billions in hydro projects.	don't build it	
73	Yes	I own property , no home there yet	More quads will come through and tresspass	move the line miles to the east	Hwy 501	Yes			
74	Yes	The line runs through my property that is my work place, living place and recreational area: *QS Provided*	The route is crossing prime farmland, the line would hinder aerial crop spraying and drag hose manure application.	Choose the route 207		Yes	The liability burden from the hydro line could sky rocked the insurance of my farm in the future. Therefore a payment of only 150% of the land value is a joke.	Choose the route 207	*QS Provided*

				3. Have you attended or plan to attend an open house for the Project?	How did you hear of the Open Houses?										4. Website Information Helpful?	
	Additional Concerns/Impacts?	Concern (C)	Mitigation (C)		Location (C)	Postcard	Letter	Newspaper	Website	Phone	Poster	Email	Social Media	Radio		Word of Mouth
1																
2																
3				Unsure		1										Somewhat.
4	No			Unsure		1										
5				Yes		1										YES but it needs to be re routed!
6				Yes		1										yes
7																
8	Yes	health, property value	move to east side	Yes		1										yes and I feel stronger with my opposition to the project
9	Yes	camping area	use alternate route	Yes		1										helpful but need more information
10				Yes		1					1			1		helpful, yet uncomplete.
11				Yes								1				Yes
12	No			Yes		1										Yes
13																
14	Yes	I believe that the property value of any resident that have towers in their yard will definitely go down. Resale of their property will be almost impossible. Who wants to live with towers, the constant noise, possible interruption of cellular and internet service, possibility of health hazards, seeing that whenever you look out the window, etc. in their yards. How can you impose this on any landowner.	Choosing the more easterly route 207, I believe that there will be less human impact. Don't go through residents' yards.	Yes			1		1		1	1		1		Somewhat.
15	Yes	I believe there is a very delicate ecosystem that lives there and this line would be destroying it in it's entirety	Do not go through this block. This entire section is a marshland.	Yes											1	I have not yet attended an open house as I was not aware this was taking place until a friend who also lives in the RM of Tache recieved a letter in the mail.

				3. Have you attended or plan to attend an open house for the Project?	How did you hear of the Open Houses?										4. Website Information Helpful?	
	Additional Concerns/Impacts?	Concern (C)	Mitigation (C)		Location (C)	Postcard	Letter	Newspaper	Website	Phone	Poster	Email	Social Media	Radio		Word of Mouth
	No															
30				Yes		1	1						1	1		NO
31	Yes	I am concerned about the value of my property plummeting	I have bought a home within the city of Winnipeg to avoid projects like this one and now hysro will be building as close to the city as they can without being considered the city	Winnipeg south	Yes		1									I understand the project
32	No				Yes		1				1			1		yes project is well understood
33	Yes	people should not be forced to live so close to a line such as this	chosing once again the 207 line instead of the 208	*QS Provided*	Yes		1									yes, I understand that MB Hydro is trying to convince people that this is ok but it is not. We do not want this line on our land. The reps tried to convince us at the open house but we are not convinced that this is safe.
34	Yes	many forest varieties of orchids & ginseng,	moving the line into the marsh, off of the ridge & avaioding the forest	*QS Provided*	Yes		1	1			1					somewhat
35																
36					Yes									1		
37																
38																
39																
40																
41	Yes				Yes			1								partly
42																
43					Yes			1	1		1		1	1	1	Yes. Doesn't mean I approve of it
44					Unsure									1		
45	No				Yes		1				1			1		All the information provided does is make hydro look good and like they care. Not enough facts.

				3. Have you attended or plan to attend an open house for the Project?	How did you hear of the Open Houses?										4. Website Information Helpful?	
	Additional Concerns/Impacts?	Concern (C)	Mitigation (C)		Location (C)	Postcard	Letter	Newspaper	Website	Phone	Poster	Email	Social Media	Radio		Word of Mouth
46	Yes	MAKE YOUR SURVEY IPAD FRIENDLY! So difficult to check my answers when clearly survey is made for desktop.			Yes	1		1	1						1	Some of the information on the website is useful, info at open house- not so useful. The people there were doing their best but did not have persuasive arguments to make me think any of this is in the best interests of the ratepayers and land owners
47	Yes	There are rare plants and animals though out the proposed route as well as historical sites	Stop it or use low impact lines (by the way your staff didn't know this technology existed- wtf?) so it can be built along existing roadways if it really needs to be built at all	All of it	Yes		1	1			1				Not at all, most of the employees at Hydro are insulting, and bias	
48					Yes			1	1		1			1	No	
49																
50																
51																
52	Yes	the line is too close to the town of La Broquerie	move it away from our population	La Broquerie	Yes		1								no	
53																
54	No				Unsure										1 yes	
55					Yes			1							Yes, thank you	
56					Yes											
57					No		1	1	1		1		1	1	Yes	
58	Yes		Move line	*QS Provided*	Yes		1	1	1		1	1		1	No	
59																
60					Unsure		1		1						1	

				3. Have you attended or plan to attend an open house for the Project?	How did you hear of the Open Houses?										4. Website Information Helpful?	
	Additional Concerns/Impacts?	Concern (C)	Mitigation (C)		Location (C)	Postcard	Letter	Newspaper	Website	Phone	Poster	Email	Social Media	Radio		Word of Mouth
61	No															
62																
63	No			Yes				1			1				1	Yes, but i don't understand how the preferred route would be so close to the town of La Broquerie vs. the other route option that has way less human habitat
64																
65	Yes	The rates of exposure are only shown for the new line. Not taking the two other existing lines that already emit levels that would also impact my family and developing children.	Give us accurate numbers. With all lines considered	Yes		1						1				No. I view it as skewed
66	Yes			Yes			1								1	
67	No			Yes				1			1				1	somewhat
68	No			Yes		1										no
69				Yes			1				1				1	yes it was nice to discuss potential impacts with Hydro personnel at the open houses
70																
71				Unsure											1	
72	No			Yes												no. the people working the open house had no information and were not able to answer any questions. The maps they had were outdated and didn't even show some peoples houses.
73																
74	Yes	There are studies that show that the magnetic fields and stray voltage have much greater negative effect on humans and especially domestic animals than currently assumed by the WHO. Going with the route 207 would greatly reduce the number of people and domestic animals that are affected by the line.	Choose the route 207	Yes		1	1				1					No. Not at all

	5. Additional information you would like?	6. Please provide any additional comments/concerns/issues you have regarding the project:
1		
2		
3	What other proposed route were on the table?	None at this time.
4	Are properties within 1 mile be bought out	
5	Real health hazards	I do not want the lines under my property! My life and kids are in risk for cancer no matter what some one doing to water down!
6	science is unable to prove a negative, including whether low-level EMFs are completely risk free	
7		
8	My understanding is hydro and government will do whatever they want	will hydro consider anything besides there profits???
9	i would like to understand how the routes were chosen (real reasons)	The line is a mistake, MB hydro will never make back the money this will cost. The US does not need our power, taxpayers will be on the hook for the incurred debt
10	i'd like to know the environmental impacts at stake. I'd also like to understand the reasoning for the selections made regarding the route as based on the selection criteria explained in Round 2, these were not the principal factors taken into account in choosing the route in La Broquerie area (minimal disruption/risk... to human activity and health...	no one wants this in their backyard so why not avoid as many backyards as possible everywhere you can.
11		
12	How is this going to affect the value of my property?	
13		
14	That you are listening and open to the concerns of the council and residents of the R.M. of La Broquerie. We have clearly stated that we oppose your preferred route. That you consider and choose the alternate route. If that can't be worked out, look at other alternatives. Once the towers are in place, if there are health hazards to humans, it will be too late. Imagine, this is in your yard, near your loved ones, what would you do??	I am a resident of the R.M. of La Broquerie. I went to the last meeting on February 17, 2015. I am very concerned that you, Hydro, have already made your decision on the preferred route. You state that you want local feedback. Well you are getting feedback. The council from the R.M. of La Broquerie are opposed. The residents of the R.M. of La Broquerie are opposed. You have an alternate route. Look more into that one. If that can't be worked out, start looking at other alternatives. We have clearly stated that we are opposed to your preferred route. Once the towers are up, it will be too late. You also state that you want to minimize potential impacts to people and the environment. WOW... If this is true, how can you put up towers in people's backyards, middle of farmers' fields? This is highly disruptive for all of these people. Two of my sons and their families live on Quintro Road. They each have three children. One of the homes is approximately 175 meters from where you propose to put the towers. The play structure is approximately 100 meters. The other home is approximately 315 meters. They put in gardens, grow vegetables, eat healthy, exercise, etc. Imagine wanting to enjoy your yard and not putting yourself and your children at risk. HEALTH is a very big concern. Some studies say that radiation from Power Lines are dangerous for humans up to 2 kms in range. They and others are 175 meters away. As you know there are two schools in La Broquerie, one is approximately 1.4 km and the other one is approximately 1.5 km. away from your proposed route. In your studies, there is no conclusive evidence that there are no health issues. BE HONEST... Would you want towers in your backyard? Would you want your children, grandchildren playing there? I asked this question to one of your representatives and this person answered NO, I wouldn't. I asked what they would do. This person said that they would do the same as the residents of La Broquerie and oppose the project. Another big concern is property value, resale of these homes. It will be very difficult for them to sell their homes with towers in their backyards. They have all built nice homes on nice lots. They want the right to enjoy their home, their yard, peace and quiet. It is not right to impose these towers on the residents of La Broquerie. I also asked if the alternate route cost more money and was told that the cost was about the same. Human impact should be top priority. I sincerely hope that you respect our wishes and choose an alternative route. Imagine, this is your back yard, your loved ones in danger. BE HONEST! What would you do? I believe you would oppose this as we are.
15	I would like to know where the poles will be located on the actual property.	I believe that the risk on the environment outweighs the benefit of this project tenfold. Building up this area would be more expensive then it is worth.

	5.Additional information you would like?	6.Please provide any additional comments/concerns/issues you have regarding the project:
16	The real reason why Route 208 was chosen rather than route 207?	I am a resident of the R.M. of La Broquerie. I went to the last meeting on February 17, 2015. I am very concerned Manitoba Hydro, has already made its' decision on the preferred route. It seems with complete disregard for the R.M. of La Broquerie expressed and officially noted opposition to route 208. The residents of the R.M. of La Broquerie are opposed. The residents not only of adjoining land but also the residents of close to an entire community (La Broquerie) have clearly stated their opposition to your preferred route. Once the towers are up, it will be too late. It is Hydro's intent to minimize potential impacts to people and the environment. I fail to comprehend how putting up towers in people's backyards, middle of farmers' fields achieves these goals? This is highly disruptive for all of these people. I have family members and friends and relatives that own homes situated approximately 175 meters from where you propose to put the towers. Children play structures gardens, other play activities are also very close. They put in gardens, grow vegetables, eat healthy, exercise, etc. Imagine wanting to enjoy your yard and not putting yourself and your children at risk. HEALTH is a very big concern. Some studies say that radiation from Power Lines are dangerous for humans up to 2 kms in range. They and others are 175 meters away. Both La Broquerie schools are less than 1.5 km away from your proposed route. Although your studies state that there is no conclusive evidence that there are no health issues. I would argue that for every study you can produce stating no or a minimum of negative effects, one can find one stating the very opposite. I believe none of the decision makers in this process actually would want your children, grandchildren living and playing there? If so, I am certainly certain that many existing residents are willing to sell NOW!!! Another big concern is property value, resale of these homes. It will be very difficult for them to sell their homes with towers in their backyards. They have all built nice homes on nice lots. They want the right to enjoy their home, their yard, peace and quiet. It is not right to impose these towers on the residents of La Broquerie. I was told that the cost was approximately the same for Route 208 as for route 207, and that a primary concern is environmental impact. I trust Human impact should not be neglected as a top priority. I sincerely hope that you respect our wishes and choose an alternative route. Imagine, this is your back yard, your loved ones in danger. BE HONEST! What would you do? I believe you would oppose this as we are.
17	I would like to see the research that has been done by people who have NOT been paid by hydro to do research on the health effects of EMF's on humans and animals. Or how about you guys actually do more research than blindly listening to old information. But then again you'd maybe grow a conscience and realize how many peoples and animals lives would be at risk... which would obviously not be in your favour.	The bottom line is that this line is a useless waste of money that is only going to cost Manitobans more money. Solar energy is on the rise and the costs will be matching Hydro by 2024 which will decrease the number on users of hydro. Manitobans Hydro is going to keep going up for the next 30 years and will be lining your bosses pockets instead of helping us pay less for our energy. The US is able to create their own energy cleaner and cheaper than they can buy it off us so how long do you really think they will be paying to use the line. In the end of course you guys will do what you want and it's a horrifying thought that you all can sit at your desks and hear our concerns and do ABSOLUTELY NOTHING to change the outcome of this line. Who cares if children die, humans get sick and eventually die and livestock get sick and go crazy due to constant bombardment of EMF's. It's not effecting you so why should you care? As long as you get a pay check right? Do a favour for the citizens that will be effected by this and do a little more research before you blindly except the low standards that have been put in place for EMF's. www.safespaceprotection.com should get you started.
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29	none	my only concern is of reduced property value because this transmission line is in full view

	5. Additional information you would like?	6. Please provide any additional comments/concerns/issues you have regarding the project:
30	Clearer drawings, exact information	Find other solutions, other more environmentally- and humanly-friendly ways to provide a service and to do business.
31	I understand the project but do NOT agree with the project	I do not believe this project is beneficial to any Manitoban
32	no explanation given as to why the route on crown land was dropped after round 1; no good reason why; explain to me why we suffer so exports can be done; we do not gain anything	Placing the route on private land makes no sense when crown land is nearby; can be minimal affect on private landowners. YOU HAVE ANOTHER OPTION!
33	You telling us that the eastern line 207 will be preferred over the 208.	Please consider the lives you will be affecting by choosing the 208 line. The 207 will have a minimul impact on people therefore it should be seriously considered the best one.
34	more specific locations i.e square footage of damage to the forest - I would appreciate being mailed detailed maps	
35		
36		
37		
38		
39		
40		
41	Information on why the route was identified through farm/residential area and not parallelling other utility lines through the RM of Reynolds	I support moving the line farther East to avoid farming and residential properties and paralleling utility and road allowances in the RM of Reynolds
42		
43	Feedback, facts about what disk occur for people who are currently living by lines. My assumptions are that no one in their right mind would purchase homes within 200 meters from the lines. Only low income people would take advantage, not that it makes it right.	IM very disappointed to see this option being the preferred route. This will definitely have a negative impact on my family.
44		
45	The only information that will make a difference is the news that they are no longer going to build this line.	

	5.Additional information you would like?	6.Please provide any additional comments/concerns/issues you have regarding the project:
46	I would like to know the revenue that will be guaranteed upon completion of this project and I would like to know why I as a ratepayer have to have continuous increases in my hydro rates if this project is so profitable. If Hydro's USA clients Re going to pay, then shouldn't the expenses be borne by them and wouldn't the profits come from them and not us subsidizing them??	We like hydro power and do believe it can be a relatively " green" option, but i do not trust Manitoba Hydro,(nor the Selinger government) not after reading Graham Lane's paper on the subject of all of this.
47	I just wish that citizens that pay for this are given fair voice, so much for elected governments and bureaucrats	We have chosen to move out of the province due to the bad mojo created by Hydro
48	The employee needed to have a better access of where the road I live on is located on their map.	Please move it farther away. Or add extra hydro lines to current hydro towers that exist.
49		
50		
51		
52	you have no concern about EMF pollution	We have a power line going through La Broquerie with 20 milligauss of pollution and 5 milligauss is considered safe and now you want to add another massive line through our community it is insane
53		
54	how many power line structures will be on the property of concern	what type of power line towers are intended to be used, and is there compensation, how much for the property of concern?
55	continue the communication	I don't 100% agree with the project but I am okay with the route hydro has taken as long as the environmental and conservation concerns have been met
56		I am in opposition to the project.
57	Not at this time, thank you.	
58	You people do not listen to the public of the country	Listen
59		
60		

	5.Additional information you would like?	6.Please provide any additional comments/concerns/issues you have regarding the project:
61		
62		
63	I would like to know that the project will be moved further East from La Broquerie	I'm very concerned for the health of my family and the resale value of my current house
64		
65	Accurate numbers based on my exposure and the long term effects. And if there is nine then give me a letter guaranteeing that	Send people to the forum that are from hydro. Not people representing hydro. It's viewed as impersonal. Also the people you sent couldn't explain the information given to them. When asked what things meant they could not provide me with an answer. And the professional was not in attendance.
66		
67	reason for the route , why not follow all the other lines	projects like this need to be run in areas whre it does not effect the land owners, plenty of waste land and wooded areas to put these !!
68	the consultant was uninformed about the real world, no concept of rural property size and what ownership of land meant to land owners. she just spit up info from the brouchers that i could read myself.	do not negatively impact private land. landowners main concern is trespassing by ORV's and hunters.
69	confirmation of the route	it was very nice to be so well informed especially to discuss the route selection and effects with Pat and Trevor
70		
71		
72		it is not right to destroy a community when there are plenty of other options for the route with minimal impact on homes. Go east and down and you only go through bush...
73		
74	More detailed information why route 208 was chosen over route 207. Liability issue, how it might affect my insurance in the years ahead.	It concerns me the lack of information we were given at the open houses. There was no information why the route 208 was chosen over 207. It seems to me that the dead people and the environment are more important than the wellbeing of humans that have to live close to the line.

Appendix E

**E1 – Stakeholder Group and
Landowner Meeting Minutes**

E2 – Comment Sheet Data

**E3 – Online Comment Sheet
Data**

E4 – Landowner Form Data

E5 – Mapping Data

**E6 – Email and Telephone
Summary**

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF001Z	Zhoda	ALO 097	18			Y	Y	Y	Y	100-400m	Y	electric fencing- open with trees	N		N		N
R3-LF002Z	Zhoda	ALO 141	18						N		N						
R3-LF003Z	Zhoda	ALO 098, MLO 459, MLO 041	20			Y		Y	N		Y	gravel, aggregate deposits, government tested	N		N		N
R3-LF004Z	Zhoda	MLO 233 & ALO 037	18			Y			Y	100-400m	Y	Pond for watering cattle close to #12 on the east side of property	N		N		N
R3-LF005Z	Zhoda	MLO 693	18/19			Y			Y	>400m	N		N		N		N
R3-LF006Z	Zhoda	ALO 106	18	Y	Y	Y	Y		Y		Y	A lot of fences. Residence on SW corner(?).	N		N		N
R3-LF001P	Piney	ALO 035	23			Y	Y	Y	N		N	wide open land, formerly cropland	N		N		N
R3-LF002P	Piney	ALO 084	20	Y	Y	Y			N	>400m		Mostly conservation land	N		N		N
R3-LF001W	Winnipeg	MLO 1929	5					Y	Y	100-400m	Y	woodlot to Nrth	N		N		N
R3-LF002W	Winnipeg	MLO 1934		Y		Y			Y	100-400m	N		N		N		N
R3-LF003W	Winnipeg	MLO 1962	6														
R3-LF004W	Winnipeg	MLO 1459							N		N		N		N		N

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF005W	Winnipeg	MLO 880	5		Y	Y			Y	100-400m	Y	Shelterbelt	N		N		N
R3-LF006W	Winnipeg	MLO 1901	5		Y	Y			Y		N		N		N		N
R3-LF007W	Winnipeg	MLO 072 and MLO 658	8	Y		Y			N			Along MH owned ROW near Dugald	N		N		N
R3-LF003P	Piney	ALO 134				Y			N			Plan to have a traditional medicine training centre on the property	N		N		N
R3-LF008W	Winnipeg	MLO 1609	5														
R3-LF009W	Winnipeg	MLO 1002	7	Y		Y			Y	75-100m	N		N		N		N
R3-LF010W	Winnipeg	MLO 791	6						Y	>400m	N		N		N		N
R3-LF011W	Winnipeg	MLO 160					Y		N			Wooded, used to have a mobile home					
R3-LF012W	Winnipeg	MLO 1943	5		Y	Y			Y	>400m	Y	Shelterbelt (20 ft)	N		N		N

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF013W	Winnipeg	MLO 2146		Y	Y	Y			N		N	Residence planned for 2016. 1.55 km away. East of Cottonwood, on 46 N, east of 42 (just east of existing)	N		N		Y
R3-LF014W	Winnipeg	MLO 2106	5		Y	Y			Y	75-100m	N		N		N		N
R3-LF001L	La Broquerie	MLO 758							Y	>400m							
R3-LF002L	La Broquerie	MLO 028	13		Y				Y	75-100m	Y	home, shed, garage	N		N		N
R3-LF003L	La Broquerie	MLO 494	15					Y	Y				N		N		N
R3-LF004L	La Broquerie	ALO 023	12	Y	Y		Y	Y	Y	100-400m	N		N		N		N
R3-LF005L	La Broquerie	ALO 109	14		Y				N			treed-in lots, wooded lots in the past	N		N		N
R3-LF007L	LaBroquerie	MLO 298	12						Y	>400m	Y	NE-1-9-7 home quarter (res); fenced on NE-36-8-7E	N		N		N
R3-LF008L	LaBroquerie	MLO 360	14						Y		Y	treed area	N		N		N
R3-LF010L	LaBroquerie	MLO 170 (Darren Dundas)	14														
R3-LF011L	LaBroquerie	MLO 243 (Enterprise LaVerendrye Golf Course)	14				Y		N		N		N		N		N
R3-LF009L	LaBroquerie	MLO 264	14														

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF012L	LaBroquerie	MLO 108	14		Y				Y		N		N		N		N
R3-LF013L	LaBroquerie	MLO 055	14		Y				Y		N		N				N
R3-LF014L	LaBroquerie	ALO 048; MLO 369	15			Y	Y	Y	Y		Y	2 residences on property; building lots in future; green zone of RM development	N		N		N
R3-LF024L	La Broquerie	MLO 623	13						Y	75-100m	Y	20 acre property mostly woodlot (18 acres)					
R3-LF015L	LaBroquerie	ALO 029	16						Y	>400m		tree farm	N		N		N
R3-LF025L	La Broquerie	MLO 231 and MLO 571	15	Y	Y	Y	Y		Y	75-100m	N	Land is open along road	N		N		N
R3-LF016L	LaBroquerie	MLO 297	14					Y	Y	>400m							
R3-LF017L	LaBroquerie	MLO 611	14				Y										
R3-LF018L	LaBroquerie	MLO 022	14						Y		N		N		N		N
R3-LF019L	LaBroquerie	MLO 700	14		Y	Y			Y	100-400m	N		N		N		N
R3-LF026L	La Broquerie	MLO 255, MLO 343 and ALO 059	15	Y	Y	Y			Y	100-400m	Y	W 1/2 5-6-8E wooded area (planning on clearing for agriculture. N guy wires. shelter belt.	N		N		N

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF020L	LaBroquerie	MLO 283	14		Y	Y			Y	100-400m	N		N		N		N
R3-LF021L	LaBroquerie	ALO 111	17				Y		Y		Y	trees and retention pond	N		N		N
R3-LF027L	LaBroquerie	MLO 740	14						Y		N		N		N		N
R3-LF022L	La Broquerie	MLO 614	14			Y			Y		N		N		N		N
R3-LF028L	LaBroquerie	ALO 018	16		Y	Y	Y	Y	N		N	line going through some bush and open land	N		N		N
R3-LF023L	La Broquerie	MLO 2147	16		Y	Y			Y	>400m	N		N		N		N
R3-LF029L	LaBroquerie	ALO 079	14	Y	Y	Y			N		Y	trees at Ntheast corner and wetland on west side of property	N		N		N
R3-LF030L	Phone Call	ALO 054	19					Y	N					uncertain		uncertain	
R3-LF031L	LaBroquerie	MLO 202	14			Y			Y	>400m	N		N		N		N
R3-LF032L	LaBroquerie	MLO 130	14		Y	Y			Y	100-400m							
R3-LF034L	LaBroquerie	ALO 078	14		Y	Y			N				N		N		N
R3-LF035L	LaBroquerie	MLO 189	14			Y				>400m							
R3-LF036L	LaBroquerie	MLO 267	14		Y				Y	>400m	N		N		N		N

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF037L	LaBroquerie	MLO 165	14						Y	75-100m	N		N		N		N
R3-LF038L	LaBroquerie	MLO 534	14			Y			Y	100-400m		lot setback from road west of ROW (approx 300m)	N		N		N
R3-LF039L	LaBroquerie	MLO 611	14						Y	>400m		tree stand approx 100m away (NW 32-6-8E1)					
R3-LF040L	LaBroquerie	ALO 034, ALO 014, ALO 058	15				Y		Y		Y	shelterbelt along half-mile (evergreens), between #3 on map; rusted fence line	N		N		N
R3-LF041L	LaBroquerie	MLO 673	14														
R3-LF042L	LaBroquerie	ALO 62; MLO 359	14			Y			N		Y	trees over where house would be but Nt going to build Nw; plan to build home and shop on ALO 062	N		N		N
R3-LF043L	LaBroquerie	MLO 394	14														
R3-LF044L	LaBroquerie	ALO 030	16						N		N	NW 10-5-8E1	N		N		N
R3-LF045L	LaBroquerie	ALO 126	16		Y	Y			N		N	warmup shack adjacent to ROW, approx 50m from line	N		N		N
R3-LF046L	La Broquerie	ALO 113	16	Y	Y				Y	>400m			N		N		N
R3-LF054L	LaBroquerie	MLO 016	14						Y								
R3-LF055L	LaBroquerie	ALO 008	14						Y	100-400m	Y	woodstand and creek	N		N		Y

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF056L	LaBroquerie	MLO 018	15		Y	Y			Y	>400m	N		N		N		N
R3-LF047L	La Broquerie	MLO 594	14/15			Y			Y	>400m		Pond on PR 210 land	N		N		Y
R3-LF057L	LaBroquerie	ALO 131	16	Y	Y	Y			Y	>400m	N	2 homes on parcel, approx 650m from route	N		N		N
R3-LF048L	La Broquerie	MLO 622	14						Y	>400m			N		N		N
R3-LF058L	LaBroquerie	MLO 491	15														
R3-LF049L	La Broquerie	MLO 676	14						Y	>400m	N		N		N		N
R3-LF059L	LaBroquerie	MLO 757	14						Y	100-400m							
R3-LF060L	LaBroquerie	MLO 416	15		Y	Y			Y	100-400m							
R3-LF050L	La Broquerie	MLO 019	14						Y				N		N		N
R3-LF061L	LaBroquerie	ALO 031	19	Y	Y	Y			Y		Y	shelter from trees around river used for recreation	N		N		N
R3-LF062L	LaBroquerie	ALO 114	14		Y	Y			N		N		N		N		N
R3-LF051L	La Broquerie	ALO 065, MLO 397	15				Y		Y	>400m	Y	fence on property line and cross fence	N		N		N

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF063L	LaBroquerie	ALO 016	14		Y	Y			Y	100-400m		all cultivated land	N		N		N
R3-LF052L	La Broquerie	MLO 184	15				Y		Y	100-400m	Y		N		N		N
R3-LF064L	LaBroquerie	MLO 010	14						Y	>400m			N		N		N
R3-LF053L	La Broquerie	ALO 071					Y		Y	>400m	N		N		N		Y
R3-LF033L	LaBroquerie	ALO 088	14		Y				Y	>400m	N	2 homes on parcel of land	N		N		Y
R3-LF001S	Ste. Anne	ALO 067			Y	Y	Y	Y	Y	75-100m			N		N		N
R3-LF002S	Ste Anne	MLO 185							Y		N		N		N		N
R3-LF003S	Ste Anne	ALO 044	14						N			treed area - entire parcel	Y	adjacent to property. NE 20-7-6 E	N		N
R3-LF004S	Ste Anne	ALO 077					Y		Y		Y		N		N		
R3-LF005S	Ste Anne	3 km from home	11														
R3-LF006S	Ste Anne	MLO 1386			Y	Y				>400m	N						
R3-LF007S	Ste Anne	ALO 061, MLO 337								100-400m		swamp land in the corner of the land	N		N		

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF008S	Ste Anne	ALO 087		Y					N		N	all cultivated lands	N		N		N
R3-LF009S	Ste Anne	MLO 625	8				Y										
R3-LF010S	Ste Anne	ALO 102								100-400m			N		N		
R3-LF011S	Ste Anne	ALO 072 and MLO 254 (same property)	12		Y	Y			Y	75-100m	N		N		N		N
R3-LF012S	Ste Anne	ALO 115, MLO 590				Y			Y	>400m							
R3-LF013S	Ste Anne	ALO 133	12	Y	Y	Y	Y		Y	>400m			N		N	Richer is the closest	N
R3-LF014S	Ste Anne	ALO 038							Y	100-400m	N		N		N		N
R3-LF015S	Ste Anne	MLO 065							Y	>400m							
R3-LF016S	Ste Anne	ALO 049	13				Y		Y		N		N		N		N

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF017S	Ste Anne	ALO 100	11		Y				Y	100-400m	Y	woods, ponds	N		N		N
R3-LF018S	Ste Anne	ALO 045							N				N		N		N
R3-LF019S	Ste Anne	ALO 032, MLO 177	12		Y	Y	Y		Y		N	All bush right Nw	N		N		N
R3-LF020S	Ste Anne	ALO 140	11			Y			Y		Y	gravel pit (surface)- more than 14 ft under hard pan- identified on map. Clear cut 10 years ago (young poplar Nw)	N		N		N
R3-LF021S	Ste. Anne	MLO 692	11					Y	Y	100-400m	N		N		N		N
R3-LF036S	Ste Anne	ALO 107		Y	Y	Y			Y	100-400m			N		N		N
R3-LF022S	Ste. Anne	MLO 517	11						Y	>400m							
R3-LF037S	Ste Anne	ALO 118	12			Y			Y				N		N		N
R3-LF023S	Ste. Anne	MLO 471	11			Y			Y	>400m		home is in St. Genevieve, 1.58km from line					
R3-LF024S	Ste. Anne	MLO 539	12						Y	>400m		1.2 km from preferred route					
R3-LF025S	Ste. Anne	MLO 729	12						Y	>400m		house about 600m from line					
R3-LF026S	Ste. Anne	MLO 717	12			Y			Y	>400m		residence 1.2km from line					

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF038S	Ste Anne	MLO 508, ALO 094	11						Y	>400m	N		N		N		Y
R3-LF027S	Ste. Anne	MLO 185	12														
R3-LF028S	Ste. Anne	MLO 259	11		Y							home 1.3km from line					
R3-LF039S	Ste Anne	MLO 097	9					Y									
R3-LF040S	Ste Anne	ALO 076, ALO 093	14		Y	Y			Y	>400m	N		N		N		N
R3-LF029S	Ste. Anne	MLO 714, MLO 713	11														
R3-LF030S	Ste. Anne	MLO 546	12						Y	>400m		0.913km from residence	N		N		
R3-LF031S	Ste. Anne	MLO 280	11														
R3-LF032S	Ste. Anne	ALO 115	11		Y												
R3-LF033S	Ste. Anne	ALO 015	12		Y				Y								
R3-LF034S	Ste. Anne	ALO 007	11		Y				Y	100-400m							
R3-LF035S	Ste. Anne	ALO 073	11						N				N		N		N
R3-LF041S	Ste Anne	MLO 653															

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF042S	Ste Anne	ALO 103	10			Y	Y		Y		Y	yard site, machine shed on edge within ROW. Mobile and house are both rented	Y	approximately 345 m Nrth of ROW - since 1976. Bended airstrip	N		
R3-LF044S	Ste. Anne	ALO 028, MLO 306	12						Y		Y	woodlot (heating, fires); residence on ALO property	N		N		N
R3-LF045S	Ste. Anne	MLO 1686	7		Y				Y	100-400m	N		N		N		Y
R3-LF046S	Ste. Anne	ALO 046, ALO 050	10						N		Y	woodlot, pasture	N		N		N
R3-LF043S	Ste Anne	ALO 121			Y				Y	>400m	Y	fences	N		N		N
R3-LF047S	Ste. Anne	ALO 139	12						Y	>400m			N		N		N
R3-LF048S	Ste. Anne	ALO 127	12					Y									
R3-LF049S	Ste. Anne	ALO 025, MLO 143	12	Y		Y			Y	100-400m	Y	fenced on both sides of property; standing water in swamp	N		N		N
R3-LF050S	Ste. Anne	MLO 446	10														
R3-LF051S	Ste. Anne	MLO 587	11														
R3-LF052S	Ste. Anne	MLO 076, ALO 108 (Nt on property)	10						Y	>400m		residence about 1/2mile	N		N		N
R3-LF001H	Headingley	MLO 145	2				Y		Y	100-400m		residence 380m from line					
R3-LF002H	Headingley	MLO 1240	2			Y											

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF003H	Headingley	MLO 1357	1			Y			Y	>400m	N						
R3-LF005H	Headingley	MLO 1739	2					Y									
R3-LF006H	Headingley	MLO 1441	3			Y		Y	Y	100-400m		residence approx 380m away					
R3-LF002OB	Oak Bluff	MLO 2068	6				Y		Y	>400m			N		N		N
R3-LF001R	Richer	n/a	12			Y											
R3-LF002R	Richer	ALO 100	11														
R3-LF003R	Richer	ALO 140	11			Y	Y										
R3-LF001OB	Oak Bluff	MLO 2149		Y				Y	N		N		N		N		N
R3-LF003OB	Oak Bluff	MLO 1396	4			Y			Y	>400m			N		N		Y
R3-LF004OB	Oak Bluff	MLO 1532	3		Y	Y			Y	100-400m							
R3-LF004R	Richer	MLO 2148					Y		N	100-400m	N		N		N		Y
R3-LF005OB	Oak Bluff	MLO 925	4						Y	>400m		residence 500m from line on 12acre lot	N		N		N
R3-LF006OB	Oak Bluff	MLO 1312	4						N		N		N		N		N
R3-LF005R	Richer	ALO 032	1				Y										
R3-LF007R	Richer	ALO 080	15				Y		Y	>400m	N		N		N		N

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF006R	Richer	ALO 107	10	Y	Y												
R3-LF008R	Richer	ALO 092	12										N		N		
R3-LF009R	Richer	ALO 099	13						N		N		N		N		N
R3-LF001D	Dugald	ALO 120	11	Y	Y				Y	100-400m							
R3-LF002D	Dugald	MLO 145						Y									
R3-LF004D	Dugald	MLO 518	9	Y			Y		Y		N	residence Nt owned	N		N		N
R3-LF005D	Dugald	ALO 038	11		Y				Y	100-400m	Y	trees	N		N		N
R3-LF006D	Dugald	MLO 429	10						Y	100-400m	N		Y	SW 29-10-7E	N		
R3-LF001A	landowner home	ALO 052	17		Y	Y			N		Y	trees; recreational trail, hunting; wildlife mgt	N		N		N
R3-LF002A	Winnipeg	MLO 940	5	Y	Y	Y		Y	Y	>400m	N		N		N		N
R3-LF001ST	Hylife office	ALO 057	16/17			Y	Y										
R3-LF004A	Phone Call	ALO 036	13			Y			N								

AECOM Reference Number	Venue	ALO/MLO #	Map ID	Tower Spotting	Route Modification	Mapping	Follow Up	Other	Is there a residence on the parcel?	If so, how close is it to an Alternative Route Segment?	Are their potential obstructions (such as shelterbelts, trees (woodlot), structures, retention ponds) along the Preferred Route through your property?	Explain	Is there an airstrip, on or adjacent to this property?	Air strip details	Is there a communication tower on or adjacent to this property?	Communication tower details	Are there approved subdivision applications on this property?
R3-LF003A	Ste. Anne/Letter	ALO 086 and ALO 074			Y	N	Y	Y	Y	100-400m	Y	trees, a valued ecosystem, selectively used as firewood	N		N		N
R3-LF001T	Steinbach	ALO 036	14		Y	Y			N								N

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF001Z		Own	One parcel in estate with son	Annual Cropping	also includes hayland/forage, pasture/grazing and livestock production. Automotive repair and sales and wrecking yard.	cereal rotation, sorghum, corn, rotation of hay	cattle	N	N		N	Y
R3-LF002Z		Own	rent out for hayland	Hayland/Forage	bushed fenceline along other property							
R3-LF003Z		Own		Annual Cropping	hayland/forage, feed	feed	cattle	N	N		N	Y
R3-LF004Z		Own		Pasture/Grazing	Landowner prefer to see lattice steel structure as the land could be cultivated		beef cattle	N	N		N	N
R3-LF005Z		Own		Pasture/Grazing	Livestock production		beef cattle. Cow/calf operation	N	N		N	N
R3-LF006Z		Own		Pasture/Grazing	Rural residential	pasture	cow/calf operation - 60 animals					
R3-LF001P		Own	sole owners	Hayland/Forage				N	N		N	N
R3-LF002P	cemetery on section (but Nt on property). NW corner of section. Lisa lives on adjacent parcel, but Nt on affected parcel.	Own		Woodlot	conservation, selectively take wood, gravel, horses							
R3-LF001W		Own		Rural Residential								
R3-LF002W		Own		Rural Residential				N	N		N	N
R3-LF003W												
R3-LF004W		Own		Rural Residential				N	N		N	N

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF005W		Own		Other	City of Winnipeg Residential							
R3-LF006W		Own		Rural Residential				N	N		N	N
R3-LF007W		Own	Own- partner in Corporation SE 27 and SW 26. Lease SE 26-10 5E	Annual Cropping		caNla, sunflower, corn, wheat, barley, oats, soyabean	hogs	Y	Y		N	Y
R3-LF003P		Own		Other	Harvest medicines: cedar etc.-personal and some people go with her. Harvest medicines and package them.			N	N		N	N
R3-LF008W												
R3-LF009W		Own		Rural Residential				N	N			N
R3-LF010W		Own	Home on Forbes	Rural Residential				N	N		N	N
R3-LF011W		Own	Would like to and is currently trying to sell property. Only has 1 title which splits the property in two. He anticipates additional width necessary or are corridors here? Makes it difficult to sell, municipality won't approve subdivision. Difficult position.		Bush land, farmable							N
R3-LF012W		Own		Annual Cropping		CaNla or wheat, flax		N	Y		N	N

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF013W		Own		Other	bush							
R3-LF014W		Own		Rural Residential				N	N		N	N
R3-LF001L												
R3-LF002L		Own		Commercial/Industrial	parking for truck, bobcat, etc.			N	N		N	N
R3-LF003L		Own	and lease to neighbours for agricultural use	Annual Cropping	and hayland/forage	corn, hay		Y	Y		N	N
R3-LF004L		Own		Rural Residential	and other: potential orchid development (organic)			N	N		N	N
R3-LF005L	Plans have been discussed with RM & Steinbach developers	Own	sole owners	Other	potential for development, current zoning Nt identified			N	N		N	N
R3-LF007L		Own		Pasture/Grazing	approximately 60 cattle (NE-36-8-7E1)		cattle	N	N		N	N
R3-LF008L		Own		Rural Residential								
R3-LF010L												
R3-LF011L		Own	own in partnership	Other	golf course							
R3-LF009L												

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF012L		Own		Rural Residential								
R3-LF013L				Rural Residential								
R3-LF014L	potential in future	Own	subdivided lot on quarter section	Annual Cropping	annual cropping; hayland/forage; pasture/grazing; livestock production; farmstead; rural residential	forage, grain	beef	N	Y		N	Y
R3-LF024L												
R3-LF015L		Own		Other	tree farm: scotch pine, red pine, jack pine, spruce (managed woodlot)							
R3-LF025L		Own		Annual Cropping	rural residential and commercial/industrial	corn, etc.						
R3-LF016L		Own	with wife	Other	20 acres residential							
R3-LF017L												
R3-LF018L		Own		Rural Residential								
R3-LF019L		Own		Rural Residential				N	N		N	N
R3-LF026L		Own		Annual Cropping	Hayland/forage, woodlot, farmstead, rural residential	alfalfa, corn, soyabeans	dairy	Y	Y		N	Y

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF020L		Own		Rural Residential				N	N		N	N
R3-LF021L		Own		Rural Residential	future livestock use on property (Nt currently)							
R3-LF027L		Own		Rural Residential	2 acres							
R3-LF022L		Own	rented out	Annual Cropping	Rural residential, 44 acres							
R3-LF028L		Own		Other	Nt using land right Nw, plan to have cattle on property			N	N		N	N
R3-LF023L		Own		Livestock	rural residential		horses and cattle beginning in spring of 2015	N	N		N	N
R3-LF029L		Own		Annual Cropping		alfalfa, corn, peas, caNla		Y	N		Y	N
R3-LF030L		Own		Other	bought property for investment, currently Nt used agriculturally			N	N		N	N
R3-LF031L		Own		Other	residential, live in the village of LaBroquerie			N	N		N	N
R3-LF032L												
R3-LF034L		Own		Annual Cropping	10 acres of park; 15 acres of seeding	corn, soybean, caNla		Y	N		N	N
R3-LF035L												
R3-LF036L		Own		Rural Residential				N	N		N	N

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF037L		Own		Rural Residential				N	N		N	N
R3-LF038L		Own		Rural Residential	property is close to river							
R3-LF039L		Own		Rural Residential				N	N		N	N
R3-LF040L		Own		Annual Cropping	also hayland/forage	hay, corns, caNla, winter wheat, barley; ALO058: seeded alfalfa and companion crops (2015); ALO 014: soybeans (2015)		Y	Y	depends on weather	N	N
R3-LF041L												
R3-LF042L		Own		Hayland/Forage								
R3-LF043L												
R3-LF044L		Own		Pasture/Grazing		seeded hay	planned cattle	N	N		N	N
R3-LF045L		Own	7 Oaks Game & Fish Assn.	Other	Recreational			N	N		N	N
R3-LF046L		Own	owned by Porcherie Gauthier Ltd.	Annual Cropping	Hayland forage, pasture/grazing, livestock production, rural residential	mostly hay, corn	hogs and cattle	Y	N	NI currently	N	Y
R3-LF054L												
R3-LF055L	5 acre cut out for home	Own		Hayland/Forage		seeded for hay and barley (rotation)			N		N	N

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF056L	possible split, probably 5 acre parcel (NW 20-6-8 EPM, SW 4-6-8 EPM)	Own		Annual Cropping		alfalfa (3 year), corn, soy, sunflowers	dairy cattle on NW	Y	Y	1 in 10 years	N	Y
R3-LF047L	Subdivision application for 3 story condos	Own		Rural Residential	Second property - plans to develop for rural residential.							
R3-LF057L		Own		Annual Cropping	annual cropping, hayland/forage, pasture/grazing, livestock production, rural residential	hay and corn	cattle and calves	Y	N		N	Y
R3-LF048L		Own		Rural Residential				N	N		N	N
R3-LF058L		Own	whole quarter section	Hayland/Forage	rents out for agriculture	hay, grain			N		N	N
R3-LF049L	Plans to subdivide this year	Own		Rural Residential	other: hobby farm		for own consumption	N	N		N	N
R3-LF059L		Own		Hayland/Forage	large garden, lets neighbour farmer set hay in exchange for manure on the garden; goats and chickens this summer		goats and chickens this summer for personal meat, milk and eggs					N
R3-LF060L		Own		Rural Residential								
R3-LF050L		Own		Rural Residential								
R3-LF061L		Own	Dave and Monica Theissen	Hayland/Forage	also recreational	hay			N			N
R3-LF062L		Own		Annual Cropping	row crop	corn, beans	N	Y	Y		N	N
R3-LF051L		Own		Hayland/Forage	Pasture/grazing, hayland/forage, rural residential	alfalfa	beef and horses	N	N		N	N

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF063L		Own		Annual Cropping	hay, grain, pasture (300 cattle in the field where the line is going through)	corn, oats, hay	cattle, a couple of horses	N	Y	if too wet to do ground spraying	N	
R3-LF052L		Own		Rural Residential	35 acres, other: fish pond							
R3-LF064L		Own										
R3-LF053L	2 x 40 acre parcels	Own		Pasture/Grazing		seeded hay	cattle - 20 head	N	N		N	N
R3-LF033L	approved 2 parcels	Own	Anita and Luc Tetrault	Annual Cropping	and rural residential	corn, soy beans, barley		N	N		N	N
R3-LF001S		Own		Rural Residential				N	N		N	N
R3-LF002S		Own		Rural Residential								
R3-LF003S		Own		Woodlot	recreational area			N	N		N	N
R3-LF004S		Own		Rural Residential	80 acres							
R3-LF005S												
R3-LF006S												
R3-LF007S	Nt on the section. We already moved the line off the subdivision on his property. Just clipping corner.	Own		Woodlot	cut wood off property, affected corner is low lying swamp - N trees.							

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF008S		Own		Hayland/Forage	Hayland that gets cultivated every 4-5 years	hayland		N	N		N	N
R3-LF009S												
R3-LF010S		Own			residence. Potential for hobby farm							
R3-LF011S		Own		Hayland/Forage	Rural residential	Hay		N	N		N	N
R3-LF012S												
R3-LF013S		Own		Rural Residential	trout production (zoned as aquaculture with fruit trees on property)		produce trout	Y	N		N	N
R3-LF014S		Own		Annual Cropping	Rural residential	barley, wheat		Y	N		N	N
R3-LF015S		Own		Pasture/Grazing	woodlot- firewood	pasture	horses and cattle					N
R3-LF016S		Own		Rural Residential	82 acres							

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF017S		Own		Woodlot	Rural residential. The property has protected aggregate - natural resource. Mines Branch has identified this property with a special designation.			N	N		N	N
R3-LF018S		Own		Pasture/Grazing		Was pasture land before capability of natural hay		N	N		N	N
R3-LF019S	Pending right Nw - discussed with TJ	Own		Other	zoned agricultural							
R3-LF020S		Own		Pasture/Grazing							N	Y
R3-LF021S		Own		Rural Residential			N	N	N		N	N
R3-LF036S		Own		Hayland/Forage		was seeded hay prior to 1997 flood						
R3-LF022S												
R3-LF037S	N plans to subdivide, N plans for easement	Own		Rural Residential	commercial/industrial: back 35 recreational							
R3-LF023S												
R3-LF024S												
R3-LF025S												
R3-LF026S												

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF038S	homestead subdivided out and approved (5 acres). RM of Tache is re-zoning frontage.	Own		Pasture/Grazing	Rural residential			N	N		N	N
R3-LF027S		Own		Rural Residential		Nne		N	N		N	N
R3-LF028S												
R3-LF039S												
R3-LF040S		Own		Annual Cropping	livestock production, rural residential	hay, corn, soyabean	dairy cattle (500 animals)	Y	N	Nt right Nw, but uses once every 10 years.	N	Y
R3-LF029S												
R3-LF030S		Own		Rural Residential				N	N		N	N
R3-LF031S												
R3-LF032S												
R3-LF033S		Own		Pasture/Grazing	also rural residential		about 45 cattle	N	N		N	N
R3-LF034S		Own		Rural Residential				N	N		N	N
R3-LF035S												
R3-LF041S												

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF042S	Originally planned to subdivide 5 acre parcels on the south portion, but did not go through (did not subdivide)	Own		Hayland/Forage	Rural residential, oats for deer is proposed ROW, alfalfa (approx. 30 acres) and alfalfa garden areas on property as well.	oats, alfalfa, hay						
R3-LF044S	but plans to subdivide in the future	Own		Rural Residential	and woodlot							
R3-LF045S		Own				N	N	N	N		N	N
R3-LF046S		Own	joint owners (wife and sister)	Pasture/Grazing	and woodlot							
R3-LF043S	-future plan for retirement, 3 x 5 acre lots along North side of property	Own		Pasture/Grazing	Rural residential		40 head of cattle	N	N		N	N
R3-LF047S		Own		Rural Residential				N	N		N	N
R3-LF048S												
R3-LF049S		Own		Pasture/Grazing	rural residential; plans for small hobby farm		potential for small hobby farm					
R3-LF050S												
R3-LF051S		Own		Rural Residential	and woodlot							
R3-LF052S		Own		Hayland/Forage	and rural residential	hay, seeded alfalfa, hay						
R3-LF001H												
R3-LF002H												

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF003H						alfalfa, corn, barely, soya bean		Y	N		N	N
R3-LF005H												
R3-LF006H					residential use							
R3-LF002OB				Rural Residential			2 horses	N	N		N	N
R3-LF001R												
R3-LF002R												
R3-LF003R												
R3-LF001OB		Own		Annual Cropping		wheat, oats, caNla, soy bean		Y	N	but existing towers have stopped him from using aerial application	N	N
R3-LF003OB	subdivided triangle of parcel, divided by railroad track (shown on map)	Own	renting to aNther party	Annual Cropping		grain			N		N	N
R3-LF004OB												
R3-LF004R	SE of property a subdivision is pending. RM of Ste Anne.	Own		Rural Residential	Intention to build a residence. 5 acres. Decision pending this project.							
R3-LF005OB		Own		Rural Residential								
R3-LF006OB		Own		Annual Cropping		wheat, soy, caNla, corn, sunflower	N	Y	Y	last resort	N	N
R3-LF005R												
R3-LF007R		Own		Annual Cropping		alfalfa, soy, sunflowers	dairy	Y	Y		N	Y

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF006R												
R3-LF008R		Own		Hayland/Forage		seeded hay about 4-5 years ago						
R3-LF009R		Own		Pasture/Grazing		N	N	N	N		N	N
R3-LF001D												
R3-LF002D												
R3-LF004D		Own		Annual Cropping		corn, sunflowers, wheat, soybeans		Y	Y		N	N
R3-LF005D	future subdivision potential	Own	owned by Ed Rak (father); son (Tom Rak) will likely own	Hayland/Forage	and woodlot, rural residential and hunting land			N	N		N	N
R3-LF006D		Own		Other	hobby farm; hayland/forage; pasture/grazing	alfalfa, sweet grass, barley	chickens, pigs (hobby farm)	N	N		N	N
R3-LF001A		Own		Other	recreational, wildlife mgt, hunting	n/a	n/a	N	N		N	N
R3-LF002A		Own		Other	Residential	na	na					
R3-LF001ST				Livestock	and pasture/grazing		hogs, cattle					Y
R3-LF004A												

AECOM Reference Number	Subdivision details	Are you the sole owner or do you lease the property in question?	Ownership details	How is the land currently being used?	Land use details	If crop production, what types of crops are you growing?	If livestock production, what types of animals are you raising?	Do you use GPS guidance systems in your operation?	Are any of your crops dependent on aerial application?	Aerial application details	Are your farming practices on the property in question organically certified?	Is this an Intensive Livestock Operation?
R3-LF003A		Own		Rural Residential	other: trees selectively used for firewood	usually have a large vegetable garden for family use (organically grown)		N	N		N	N
R3-LF001T	Nothing formally submitted but planning to subdivide, concerned regarding resale value											

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF001Z		Y	solid spreading	N	N		Low		N	N	Nt on section in question	N
R3-LF002Z									N	N		N
R3-LF003Z		Y	solid spreading- above ground	N	N		Low	wildlife Nise, a mile from any road. N road access, so very quiet.	N			N
R3-LF004Z	approx 40 cattle every year	Y	Liquid-drag line	N	N	gardens close to the home both east and west of the home, Nt in ROW	Low	Little from highway	Y	Y	near home	N
R3-LF005Z		Y	Solid spreading	N	N		Medium	Trucks from highway	Y	Y		N
R3-LF006Z		Y	solid spreading and liquid- tank				Low		Y	Y	3 wells	N
R3-LF001P		N		N	N	N	Low		N			N
R3-LF002P							Low		N		water table very high	Y
R3-LF001W							Low	ambient like	N			N
R3-LF002W		N		N	N		Medium	Highway, railway	N	N		N
R3-LF003W												
R3-LF004W		N		N	N		Low	PTH 75	N	N		N

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF005W							Medium	Trains and Highway	N	N	Use cistern	N
R3-LF006W		N		N	N		Low	Train and traffic	N			N
R3-LF007W		Y	Liquid - drag line injection	N	N		Low	Hog barns approx 3/4 mile away	Y	Y		N
R3-LF003P		N		N	N		Low	serene- N Nise except highway	Y	N	old residence	N
R3-LF008W												
R3-LF009W		N		N	N		Low	Nne. concern with proximity and potential increase in Nise	Y	Y		N
R3-LF010W		N		N	N		Low	cars				N
R3-LF011W		N		N					Y	N		N
R3-LF012W		N		N	N		Low	road and farm equipment, geese	N	N		N

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF013W											Future well planned	
R3-LF014W		N		N	N		Low	train and traffic	N			N
R3-LF001L												
R3-LF002L		N		N	N		Low		Y	Y	Also have septic	N
R3-LF003L		N		Y			Low		Y	Y	artesian well from 1958	Y
R3-LF004L		N		N	N	berries, saskatoons	Low		Y	Y		Y
R3-LF005L		N		N	N	N			N			
R3-LF007L		N		N	N		Low		N	N		N
R3-LF008L							Low		Y	Y	Shared with neighbours	N
R3-LF010L												
R3-LF011L							Low	peaceful	Y	Y		N
R3-LF009L												

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF012L								N Nise	Y	Y		N
R3-LF013L												
R3-LF014L		Y	solid spreading	N	N		Low		Y	Y	two on property	Y
R3-LF024L												
R3-LF015L							Low	N Nise except for odd car	Y	Y		N
R3-LF025L							Low	Railway and highway 210	Y	Y	artesian well	
R3-LF016L							Low	however, trains pass by sometimes and feedmill.	Y	Y		
R3-LF017L												
R3-LF018L							Low		Y	Y		Y
R3-LF019L		N		N	N		Low	train on a clear day	N		shared well - street has two wells	Y
R3-LF026L	dairy	Y	solid spreading, liquid-tank and liquid-drag line	N	N		Low	barn, equipment, train tracks	Y	Y	2 wells in yard at NE 17-6-8 E and 2 wells on yard at SW 20-6-8 E. Identified on map.	

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF020L		N		N	N		Low	zero	Y	Y	two wells	N
R3-LF021L							Low		Y	Y	1	Y
R3-LF027L							Low	very low	Y	Y	shared well for all properties on cul-de-sac	Y
R3-LF022L								Nne	Y	Y		Y
R3-LF028L		N		N	N		Low	Nise from gun range in fall	N			N
R3-LF023L		N		N	N		Low	zero Nise	Y	Y		Y
R3-LF029L		Y	solid spreading	N	N		Low	cars	N			N
R3-LF030L		N		N	N			unsure			uncertain	
R3-LF031L		N		N	N	N	Medium	lawn mowers from golf course, air conditioners from adjacent homes.	Y	Y	feeds other 2 neighbours	N
R3-LF032L												
R3-LF034L		N		Y	N		Low	golf course Nise	N			Y
R3-LF035L												
R3-LF036L		N		N	N		Medium	rail, ATV and sNwmobiles, bikes, traffic	Y	Y		Y

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF037L		N		N	N		Low		Y	Y	next/close to house	N
R3-LF038L							Low		Y	Y	shared well	Y
R3-LF039L		N		N	N		Low		N	N		N
R3-LF040L		Y	solid spreading or liquid (tank)	N	N		Low	highway Nise (low)	Y	Y	capped artesian well on ALO 034; both ALO 058 and ALO 014 are active	Y
R3-LF041L												
R3-LF042L							Low	very low	Y	Y		Y
R3-LF043L												
R3-LF044L		N		N	N		Low		N	N		N
R3-LF045L		N		N	N	N	Low	club functions and farm equipment	N	N		N
R3-LF046L		Y	Liquid-dragline	N	N		Low	tractors	Y	Y	9 wells are active-identified on map	N
R3-LF054L												
R3-LF055L		Y	solid spreading	N	N		Low	Nne	Y	Y	next to home	Y

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF056L		Y	solid spreading and liquid (tank)	N	N		High		Y	Y		N
R3-LF047L							Low	traffic, farm operations, railroad	Y	Y	artesian	N
R3-LF057L	320 head of cattle	Y	liquid (drag line)	N	N		Medium	trucks, wildlife, agriculture, cattle/calf	Y	Y	1 active, 1 Nt active	N
R3-LF048L		N		N	N				Y	Y		N
R3-LF058L							Low		Y	Y	by the house	N
R3-LF049L		N		N	N	N	Low		Y	Y		N
R3-LF059L		N					Low	very quiet	N		share well with the neighbours; natural spring that water comes out of the ground; usually doesn't freeze in the winter; deer come to drink	N
R3-LF060L							Low	very quiet, wants to keep it that way	N	Y	N well, on neighbours property	N
R3-LF050L							Low		Y	Y		N
R3-LF061L		N		N			Low		N	N		Y
R3-LF062L		Y	solid spreading, liquid (tank and drag line)	N	N	N	Low		N	N		N
R3-LF051L		Y	solid spreading	N	N		Low		Y	Y		N

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF063L	300 cattle	Y	solid spreading	N	N		Low	quiet	Y	Y		N
R3-LF052L							Low		Y	Y	artesian	Y
R3-LF064L							Low		Y	Y		
R3-LF053L		N		N	N		Low		Y	Y	Located next to home	N
R3-LF033L		N		Y	N	N	Low	train, plane, traffic	Y	Y	Nt near ROW	Y
R3-LF001S		N		N	N		Low		Y	Y		N
R3-LF002S							Low		Y	Y		Y
R3-LF003S		N		N	N		Low	very quiet	Y	N	hand dug (Nt used for drinking)	N
R3-LF004S								zero	Y		wells Nt active yet	N
R3-LF005S												
R3-LF006S												
R3-LF007S							Medium	trucks from Reimer Soil operation travelling down road	Y	Y	2 wells, 1/4 mile away from route. 1 drinking water, 1 return well for geothermal.	N

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF008S		Y	Solid spreading	N	N		Low		N	N		N
R3-LF009S												
R3-LF010S							Low		Y	Y	2 wells	N
R3-LF011S		N		N	N			Highway Nise	Y	Y		Y
R3-LF012S												
R3-LF013S		Y	solid spreading	N	N	2 trout ponds and 1000's of fruit trees and vegetables	Low	traffic	Y	Y	near home	Y
R3-LF014S		N		N	N		High		N	N		Y
R3-LF015S	small operation		solid spreading	Y	Y		Low		Y	Y	used for drinking water	N
R3-LF016S									Y	Y		N

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF017S		N		N	N		Low	the existing Hydro line on same piece of property, on other side of house	Y	Y		N
R3-LF018S		N		N	N		Low		N	N		
R3-LF019S							Low	very low	Y		3 wells on property	Y
R3-LF020S	purebred (limousine cattle)	N		N			Low	N Nise. Gravel pit Nrth doesn produce Nise.	Y	Y	1 well, 248 ft deep	N
R3-LF021S		N		N	N	N	Low		Y	Y		Y
R3-LF036S												
R3-LF022S												
R3-LF037S							Low		Y	Y		Y
R3-LF023S												
R3-LF024S												
R3-LF025S												
R3-LF026S												

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF038S		N		N	N		Low	Usually only a larger vehicle	Y	Y		N
R3-LF027S		N		N	N	N			Y	Y		
R3-LF028S												
R3-LF039S												
R3-LF040S		Y		N	N		Low	farm machinery	Y	Y	Near homes	N
R3-LF029S												
R3-LF030S		N		N	N	N			Y			
R3-LF031S												
R3-LF032S												
R3-LF033S		N		N	N	N	Low		Y	Y		N
R3-LF034S		N		N	N	N	Low		Y	Y		
R3-LF035S												Y
R3-LF041S												

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF042S							Low		Y		Nrth of house, 3 wells on property - one behind workshop which is Nt active and 2 wells are active	Y
R3-LF044S							High	from Trans Canada Highway, especially loud since Hydro cleared along R49R; Reimer soils 24/7 constant Nise.	Y	Y	2 wells, one active one inactive from 1950s	N
R3-LF045S		N		N	N	N	Low		Y	Y		N
R3-LF046S							Low	N Nise	N		just a dugout	N
R3-LF043S		N		N	N		Low		Y	Y		N
R3-LF047S		N		N	N		Low		Y	Y		N
R3-LF048S												
R3-LF049S							Low		Y	Y	1 well	N
R3-LF050S												
R3-LF051S							Low		Y	Y		Y
R3-LF052S		Y	solid spreading (2 years ago)	N	N		Low		Y	Y		N
R3-LF001H												
R3-LF002H												

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF003H		Y	solid spreading and liquid drag line	N	N	N						
R3-LF005H												
R3-LF006H												
R3-LF002OB		N		N	N	N	Low		Y	Y		N
R3-LF001R												
R3-LF002R												
R3-LF003R												
R3-LF001OB		N		N	N		Low	highway traffic Nise, wind, nature	N			N
R3-LF003OB		N		N	N		Low		N			N
R3-LF004OB												
R3-LF004R								Nne	N	N		N
R3-LF005OB							Low	gun club across field	N	N		Y
R3-LF006OB		N		N	N	N	Low		Y	N		N
R3-LF005R												
R3-LF007R		Y	liquid tank	N	N	N	Medium	rail line	Y	Y		N

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF006R												
R3-LF008R												
R3-LF009R		N		N	N	N	Low	existing 320kv	N	N		N
R3-LF001D												
R3-LF002D												
R3-LF004D		N		N	N	N		N Nise	N	N		Y
R3-LF005D		N		N	N	N	Medium	230kV buzzing Nise	Y	N		Y
R3-LF006D		N		N	N		Low	quiet	Y	Y		N
R3-LF001A		N		N	N	N	Low	dd car passing, mostly Nthing	N	N		N
R3-LF002A							Medium	highway 75	Y	N	old wells, Nw sealed	N
R3-LF001ST												
R3-LF004A												

AECOM Reference Number	Intensive livestock operation details	Are you spreading manure on the property?	If Y, what method of application?	Is your land irrigated?	Is your land tile drained?	If applicable, please describe any speciality production on your farm.	How would you describe the existing Nise on your property?	Nise details	Are there existing wells on your property?	Are they active?	Well details	Are there fish habitats on your property (e.g., stream, creek pond)?
R3-LF003A		N		N	N		Low	very low- occasional distant cars	Y	Y	One artesian well	N
R3-LF001T												

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF001Z				Y	crocus, lady slippers (all colours)	Y		N		Y		geese, deer, coyotes, wolves, badgers
R3-LF002Z				Y	lady slippers, some flower species	Y	Nxious weeds	N			40 acres of bush and bluffs for cover area	most of the birds
R3-LF003Z				N	Part of Sandilands watershed. Rare species in the area- Lady Slippers	Y		Y	2 ponds	Y		Salamaders, deer, waterfowl, wolves, coyote, bear
R3-LF004Z				N		N		N		Y		deer, wolf, coyotes, lots of birds, rabbits, prairie chickens
R3-LF005Z				N		Y		Y		Y		coyotes, fox, deer, skunk, wolves, and bears
R3-LF006Z	2 ponds, N fish			N	Have apple and plum trees and wild orchids	Y		Y	Nt wet all the time-wet in spring and dry by fall	Y		deer, rabbits, chickens, geese, foxes, wolf, coyote
R3-LF001P				N		N		Y	east high clay, lower toward 89 (west)	Y		chickens, deer
R3-LF002P	fish, shellfish, snail. Sundown lake floods and expands to property.	catch minNws to go fishing elsewhere	gives permission to friends to catch minNws for bait	Y	orchids, alot of different kinds of plant species. Lady slipper along roadside, ginsing in the treed area. Dense bush.			Y	Turtles in the marsh	Y		deer, turtles, rabbits, salamanders (2 kinds), toads, moose just east of the property, finds moose track, martens, lynx
R3-LF001W				Y	yellow lady slippers	Y		N		Y		deer, fox, raccoons, wild turkeys, birds
R3-LF002W				N		N		N		Y		deer, fox, frogs, woodchuk, birds, wild turkeys
R3-LF003W												
R3-LF004W				N		N		N		N		

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF005W					Probably - yellow lillies	N		N	the bush is wet	Y		deer, bear, racoon, butterflies, humming birds, squirrel, fox, geese, martens
R3-LF006W				Y		Y		N		Y		fox, deer, rabbits, squirrels, raccoons, bald eagles, falcons, migrating birds, blue heron
R3-LF007W				N		Y	Nrmal farming weeds	N		N		
R3-LF003P					Nt sure	N		N		Y		deer
R3-LF008W												
R3-LF009W				N		N		N		Y		deer come through
R3-LF010W												
R3-LF011W	creek located to the Nrth					Y			wet in spring	Y		bear, deer, ducks
R3-LF012W				N		N		N		Y		deer, coyote, fox, racoon, skunks, geese, mallards, birds

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF013W										Y		deer, bears, raccoons
R3-LF014W	pond with goldfish			Y	wildflowers	Y		N		Y		foxes, deer, rabbits, squirrels, raccoons, bald eagles, falcons, migratory bird route, ducks and geese and blue heron
R3-LF001L												
R3-LF002L				Y	all oak trees	Y	poison ivy	N		Y		deer, birds, bear
R3-LF003L	regular	Y	Y, if asked/ approved by owner	Y	60 acres of bush - pine, birch, poplar (white/black), oak, ash	Y	common	Y	low spots near river	Y		coyote, fox, martens, deer, beaver
R3-LF004L	otters			N		N		N		Y		deer, ducks
R3-LF005L		Y- along Seine River - Jackfish used to be caught there		Y	more than 10 species of trees/plants. Ladyslippers (blue, yellow)					Y		
R3-LF007L				N		N		Y		N	sandhill cranes nesting	deer, coyotes (common), bears
R3-LF008L				N		N		N		N		bear, deer, skunks, coyotes
R3-LF010L												
R3-LF011L				N		Y		Y	Seine River Lowland	Y	millions and multiple species (frog spawning)	fox, beaver, cougar, coyote, wolf, deer
R3-LF009L												

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF012L				N		N		N		N		
R3-LF013L												
R3-LF014L	jackfish, crayfish, turtle; river and natural drain in land	Y	N	Y	flowers: lady slippers	N		Y	river drain (temp)	Y		coyotes, skunk, deer, eagles
R3-LF024L												
R3-LF015L								Y	creek on property, almost a swamp for good part of year	Y		beavers, deer, rabbits, coyotes, skunks, bear, coyotes; lots of frogs
R3-LF025L				N		N		Y		Y		deer, coyotes
R3-LF016L									creek on property that drains into ditch	Y		deer, fox, rabbit, skunk
R3-LF017L												
R3-LF018L	pond			N		N		N		Y		deer, coyotes, wolves
R3-LF019L	seine river is on property	Y	n/a	N		Y	naturally occurring	Y	around river	Y		bear, deer, cougar, rabbit, fox, coyote, beaver, owls
R3-LF026L				N	unaware of any at present	Y		Y	SE 20-6-8 E	N		coyotes, deer, bear

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF020L				N		Y		Y		Y		birds, deer, bear, wolves
R3-LF021L	ponds	n/a	N	N			mostly bush			Y		beaver, squirrel, deer
R3-LF027L	ditch			N		N		Y	ditch	Y		coyotes, deer, birds, geese
R3-LF022L	Nrthern Pike	Fish	Nt voluntarily	N		Y		Y		Y		bear, fox, coyote, fox, deer, muskrat, beaver, leopard frogs, toads (lots of frogs, Nisy)
R3-LF028L				Y	lady slippers near road on west side of property	N		Y		Y		beaver, deer, bears, fox, coyote, wolves, pine martin
R3-LF023L	in river: Jackfish	N	N	N		Y		Y	17 acres of marsh	Y		bear, coyote, deer, beaver, porcupine, gofers, snakes
R3-LF029L				N		Y		Y		Y		deer, fox, wolf, rabbits, etc
R3-LF030L	uncertain if fish habitat is on property				uncertain of rare plant species on property						uncertain if wildlife habitat on property	
R3-LF031L				N		N		Y		Y		rabbit, deer, frogs, birds
R3-LF032L										Y	attached map with wildlife habitat/sightings near home	bald eagle, burrowing owls, deer, black bear, fox
R3-LF034L	Seine River	Y	N but they do	N		Y		Y	during flood season	Y		deer, bear, coyote, beaver
R3-LF035L												
R3-LF036L	minNw species	N	N			N		Y	at SE corner	Y		american bittern, geese, eagles, green heron, muskrat, beavers, fox, coyotes, deer

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF037L				N		N		N		N		
R3-LF038L	pond, N species	N	N	Y	tiger lily, goldenrod flower, white lady slippers	N		N		Y		redheaded woodpecker, bald eagle, bears, deer
R3-LF039L		N		Y	tiger lily, crocus, appears to be a goldenrod, and lady slipper (in ditch)	Y	white cap mushrooms	Y		Y		pileated woodpecker (viewed on fence); bald eagle, robins, whipperwill, grey or shorteared owl, burrowing owl (he believes they exist on property NW 32-6-8), baird sparrow
R3-LF040L	ponw on SW side of property, Nt currently maintained			N		N		Y	sloughs ID'd on map (on ALO 058 and ALO 014), avoided when tractoring	Y		whipperwill (last spring), woodpecker, deer, rabbits, sandhill crane (crop damage), bears dens, cougar (tracks), geese
R3-LF041L												
R3-LF042L	common species in creek, river and pond	N	Y, fish	N		N		Y	towards river	Y		bear, deer, fox
R3-LF043L												
R3-LF044L				N		N		N		N		
R3-LF045L				N		N		Y		Y		deer, bear, grouse, wild turkeys
R3-LF046L				N		N		Y	wetter areas-peat type-marked on map	Y		deer, bear, wolf, coyote, eagles, geese
R3-LF054L												
R3-LF055L	jacks, crayfish, turtles	N	N	Y	ladyslippers	N		Y	further east of home	Y		muskrat

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF056L				N		N		Y	spring	Y		deer, bear
R3-LF047L				N		N		Y	on property near PR 210	Y		river otter, white tailed deer, bear, fox, weasels
R3-LF057L				N		N		N		Y		coyotes, wolves, bears, etc, weasel
R3-LF048L				N		N		N		N		
R3-LF058L				N		Y		Y	low lying area that acts as a natural drain, swampy	Y		deer, bears
R3-LF049L				N		N		N		Y		bear, deer, lynx, coyotes, cougar, skunk
R3-LF059L				N				Y	natural spring	Y		deer, birds, bear, coyotes, lots of snakes
R3-LF060L				N		N			two ponds on property	Y		porcupine
R3-LF050L				N		N		N		Y		bear, deer, lynx, coyote, cougar, skunk
R3-LF061L	pike	Y	N	N		N		Y		Y		deer, muskrat, beaver, fox, fisher or marten
R3-LF062L		N	N	N		N		N		N		
R3-LF051L				N		N		Y		Y		white tailed deer, wolves, coyote, bear, ducks, geese, herons

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF063L				Y	lady slippers	N			dugout for cattle	Y	lots of bush surrounding parcel	wolves, lots of deer, foxes, bear, cougar a couple of years ago (still see tracks)
R3-LF052L	Rainbow Trout in pond	Y	N	N		N		Y	15-20 acres natural standing water	Y		otter, mink, muskrat, cormorants, herons, bear, white tailed deer, coyote
R3-LF064L				Y	lady slippers			N		Y		wolves, deer, foxes, bear, cougar (lots of frogs on driveway)
R3-LF053L				N		N		N		Y		deer, coyotes, birds
R3-LF033L	jackfish (Seine River)	Y	N	N		Y		N		Y		coyote, fox, bear, deer, beaver
R3-LF001S										Y		fawn, cranes, birds (oriole, grosbeak)
R3-LF002S		pond for recreational use only		Y	yellow and pink lady slippers	N		Y	large marsh	Y		deer, coyotes, fox, weasels, porcupine, skunk, birds
R3-LF003S				Y	Lady Slipper	N		Y	wetlands	Y		birds, lady slipper
R3-LF004S				Y	orchids, lady slippers	N		Y		Y		white tailed deer, bear, coyote, wolf, muskrat, beaver, waterfowl, yellow rail
R3-LF005S												
R3-LF006S												
R3-LF007S								Y		Y		bear, deer, coyote, eagles, wolves, fox

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF008S				N		Y	probably		there is a drainage ditch	Y		deer, bear, wolves, everthing, etc
R3-LF009S												
R3-LF010S	N fish habitats yet, but are interested in stocking the pond			N					pond	Y		deer, bear, coyote
R3-LF011S	rainbow trout	Y	N	N		Y		Y	located under the current 230	Y		deer, coyotes
R3-LF012S												
R3-LF013S	trout	Y	N			Y		Y		Y		deer, bear, turkeys, cougar, wild boar, elk, geese, ducks
R3-LF014S	carp, suckers, few Nrthern pike	N	N	N		Y		Y	adjacent to creek	Y		white tailed deer, bears, coyote, wolves, muskrat, beaver, mink
R3-LF015S				Y		Y		Y	ponds for animals	Y		wolves, coyotes, fox, racoons, beavers
R3-LF016S				N		N		Y	wetland piece	N		deer, bears, coyote, skunks

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF017S				Y	potentially	Y		Y	property is low lying, with substantial wet areas	Y		deer, fishers, martens, moose (2 yrs ago), wolves, coyotes, foxes, bear (25 in 1 yr), Leopard frogs
R3-LF018S												
R3-LF019S	pond			N				N		Y		deer, coyotes, fox, bear
R3-LF020S	duck pond- geese			N		N		Y	only when its high moisture	Y		blue heron, whooping crane, turkey, deer, bears, coyotes, fox, porcupine
R3-LF021S		N	N	Y		N		Y		Y		deer, bear, fishers, coyotes
R3-LF036S												
R3-LF022S												
R3-LF037S	minNws in spring	N	N	Y	orchids, similar plants to tall grass prairie reserve			Y	50% of property	Y		deer, coyotes, pine marten, squirrels, turtles, frog
R3-LF023S												
R3-LF024S												
R3-LF025S												
R3-LF026S												sandhill cranes, whipporwhill, eagles, lots of wildlife

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF038S				N		N				N		deer mostly, partridge, sandhill crane
R3-LF027S												
R3-LF028S												
R3-LF039S												
R3-LF040S				N		Y			Hope Creek runs through the property	Y		deer, coyotes, rabbit, eagle
R3-LF029S												
R3-LF030S												
R3-LF031S												
R3-LF032S												
R3-LF033S										Y		
R3-LF034S												
R3-LF035S	stream				unsure			Y		Y		coyotes, wolf, deer, owl
R3-LF041S												

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF042S	n/a			N				Y	low near potential corner tower placement	Y		beaver, 25 deer (live in treed area on NE corner of quarter section), prairie chickens, coyotes, skunk
R3-LF044S					unkNwn but may be ladyslippers				one pond	Y		deer, rabbits, snakes
R3-LF045S				N				N		N		
R3-LF046S	watershed from the east			Y	ladyslippers occasionally			Y		Y		coyotes, fox, bear, deer, chicken, herons
R3-LF043S				N				Y		Y		deer
R3-LF047S				N				N				beaver, fox, deer, snakes, frogs
R3-LF048S												
R3-LF049S				N				Y	under the proposed ROW	Y		deer, coyotes, rabbits, bluejays, eagles
R3-LF050S												
R3-LF051S	minNws, sticklebacks in pond	N	N	Y	lots; designated as a significant ecological area in 1989 (entire quarter-section)			Y	boggy area	Y		shrew, deer, blackbear, everything in between, martins, weasels, mink, turtles, snakes; Nt as many frogs as before
R3-LF052S				Y	ladyslippers, MB orchid			Y	lots of wetlands (swamp)	Y		deer, coyotes, bears, wolf, cougar, snakes
R3-LF001H												
R3-LF002H												

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF003H												
R3-LF005H												
R3-LF006H												
R3-LF002OB				N		N		N		N		deer, skunks, fox, wolf scat found
R3-LF001R												
R3-LF002R												
R3-LF003R												
R3-LF001OB				N		Y		N		N		deer every Nw and then, geese on way south
R3-LF003OB				N		Y	Nrmal dandelions	N		N		deer, birds
R3-LF004OB												
R3-LF004R				Y	potentially	N		Y	near peatlands to the west	Y		deer, bear, coyotes, wolves, fox
R3-LF005OB	pond but Nt stocked			N		N		Y	120'x50'	Y		deer, rabbits, fox, coyotes, skunk, racoons, ducks
R3-LF006OB				N		Y	under control	N				gophers, rabbit, racoons, groundhogs
R3-LF005R												
R3-LF007R				N		N		Y		Y		swan, geese, coyotes, bear, deer, rabbits

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF006R												
R3-LF008R												
R3-LF009R				N		N		Y	peat wetland	Y		bears, deer, coyote, wolf, fishers, porcupines, skunk, beaver, muskrat, bald eagle, turtles
R3-LF001D												
R3-LF002D												
R3-LF004D	stocked pond, Cooks Creek runs through SE quarter-section, old gravel pit seam	Y	Y	N		N		Y	pond	Y		geese, deer, bears
R3-LF005D	suckers	N	N	Y	likely	N		N		Y		deer, coyotes, fox, bear, wolves, sNwy owl, bald eagle
R3-LF006D				N		N		N		Y		deer, bears, coyotes, fox, skunks, bald eagle
R3-LF001A				N		N		Y	slough N1/2 27-4-8E1	Y		whitetailed deer, moose, elk (rare), abundance of bear; grouse, eagles (nesting), sandhill cranes
R3-LF002A				N				N	N wetland/sloughs, just ditches	Y		deer, racoons, squirrels, skunks, fox, groundhog, turkey, various bird species
R3-LF001ST												
R3-LF004A												

AECOM Reference Number	Which species of fish are found on your property?	Do you fish or bait trap on your property?	Do you allow members of the public to fish or bait trap on your property?	Do you know of any rare plant species on your property?	Rare plant details	Do you know of any weeds on your property?	Weed details	Are there wetlands/sloughs on your property?	Wetland/slough details	Does your property support wildlife habitat (i.e., uncultivated lands)?	Wildlife habitat details	What kinds of animals do you see or hear on your property?
R3-LF003A	Nt on property, but there is a creek - English River- that runs east/west, very close to our property line. It does contain fish and is used as a water source for many wild animals.			Y	pink lady slippers, culvers root, prairie crocus, mixed wood and bog/wetland, a rare willow used for weaving baskets	Y		Y	many- used by waterfowl	Y		woodchucks, squirrels, rabbits, salamanders, toads, snakes, bats, geese, ducks, bear, cougar, fox, wolves, wild boar, ground hog, frogs. Birds: piliated wood pecker, blue birds, whip-poor-wills (designated as a Threatened species), Red-headed woodpecker (designated as a threatened species), crows, ravens, chickadees, nuthatcher, wrens, robins, catbirds, thrushes, cedar waxwings, warblers, sparrows, juncos, grosbeaks, red-winged blackbirds, western meadowlarks, grackles, orioles, pine grosbeaks, purple finches, redpolls, evening grosbeaks, pine siskins, goldfinches, grouse, ducks, sandhill cranes, bald eagles, great grey owls, great horned owl, screech owl, morning doves, hummingbirds, gray jays and blue jays
R3-LF001T												bear, deer, wolves, grouse

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF001Z	Y	Y	Y	Y	coyotes, wolves		Y	birds	N		N	
R3-LF002Z	Y			Y	deer, elk, wolves, coyotes, grouse, other birds, fox		N		N			
R3-LF003Z	Y	N	N	Y	wolves, coyotes, deer	year round and nesting geese, ducks, beaver	N	feed themselves in garden	Y	Nt a designated trap line. Set out traps on property	Y	Increased, beaver increased
R3-LF004Z	Y	N	N	Y	wolves and coyotes, N specific time		N		N			
R3-LF005Z	Y	Y	Y	Y		summer	N		N			
R3-LF006Z	Y	Y	Y	Y	wolves, coyotes	Year round. In winter, right in buildings.	N	they help themselves	N			
R3-LF001P	Y	N	N	N			N		N			
R3-LF002P	Y	Y	Y	Y	moose, bear, wolves, coyotes	year round	N	except songbirds	N			
R3-LF001W	Y	Y	Y	Y	coyotes		N		N			
R3-LF002W	Y	N	N	Y	coyote- rare		N		N			
R3-LF003W												
R3-LF004W	N	N	N	N			N		N		N	

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF005W	Y	Y	Y	Y	coyote and bear		Y	birds	N			
R3-LF006W	Y	N	N	Y	coyotes	fall and winter	Y	birds	Y			
R3-LF007W	Y			Y	coyotes	mostly in spring	N		N			
R3-LF003P				Y	wolves		N		N			
R3-LF008W												
R3-LF009W	N	N	N	N			Y	birds	N		N	
R3-LF010W												
R3-LF011W				Y			N		N			
R3-LF012W	Y			Y	coyotes	late summer and fall	Y	song birds	N			

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF013W				Y	bear, coyotes							
R3-LF014W	Y	N	N	Y	coyotes	winter/fall	Y	birds	N			
R3-LF001L												
R3-LF002L	N	N	N	Y	Bear		Y	birds	N		N	
R3-LF003L	Y	Y	Y			seasonal trapping	N		N	trap and hunt allowed by friend/coworker	Y	depends on year- last year higher
R3-LF004L	N	N	N	Y	coyotes	hear them fall and winter	N		N		N	
R3-LF005L	Y	N	N	Y	wolves, foxes	year-round		deer	N		N	
R3-LF007L	N			Y	bears, coyotes	Bear (spr/sum); coyotes (all year)	N		N		N	
R3-LF008L	Y	N	N	Y	bears, coyotes	esp spring/summer/fall	Y	birds	N		N	
R3-LF010L												
R3-LF011L	Y			Y			N		N		N	too many beaver
R3-LF009L												

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF012L	N	N	N	N			N		N		N	
R3-LF013L												
R3-LF014L	Y	Y	N	Y	bear, coyotes, moose; occasionally deer		N		N			
R3-LF024L												
R3-LF015L	Y			Y			N		N			
R3-LF025L	Y	N	N	Y		anytime	N		N		N	
R3-LF016L	Y			Y	rabbits, martin (3 years ago)	Rabbits: year round	N					
R3-LF017L												
R3-LF018L	Y	N	N	Y	wolves, coyotes	annually	N		N			
R3-LF019L	Y	Y	Y	Y	coyote, bear	coyote year round, mostly fall; bear in spring	N		N			
R3-LF026L	Y	N	N	Y		spring, summer, fall, winter	N		N		N	

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF020L	Y	Y	N	Y		fall and spring	N		N		N	
R3-LF021L	Y	Y	Y	Y	wolves	annually	N		N			
R3-LF027L	Y	Y	Y	Y	bear, coyotes	N bears this winter but Y previously	Y	birds	N			
R3-LF022L	Y	Y	Y	Y	bear, wolves, coyotes	spring more common	N		N		N	
R3-LF028L	Y	Y	Y	Y		trail cameras on property; all year long	N		N			
R3-LF023L		Y	Y	Y	blueberry season, and coyotes year round		N		N			
R3-LF029L	Y	Y	Y	Y		fall and spring	N		N			
R3-LF030L							N		N			
R3-LF031L	Y	Y	Y	Y	coyotes	coyotes in fall	Y	birds	N			
R3-LF032L												
R3-LF034L	Y	N	N	Y	coyotes	coyotes all year-round	N		N			
R3-LF035L												
R3-LF036L	Y	Y	Y	Y	coyotes		Y	orioles, hummingbirds	N		N	

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF037L	N	N	N	Y	deer, black bear, coyotes, fox, lynx	black bear (spring)	N		N		N	
R3-LF038L	Y	N	N	Y	bear, wolves, coyotes	all year round	N		N			
R3-LF039L	N	N	N	Y	bear den (NW 32-6-8)	bear in spring	N		N		N	
R3-LF040L	Y	Y	Y	Y	moose (over 10 years ago), bear, coyotes	year round; two dens west of property ALO 014.	Y	occasionally birds, left dead cow for timberwolves	N			
R3-LF041L												
R3-LF042L	Y	Y	Y	Y	bear, coyotes	summer	N		N			
R3-LF043L												
R3-LF044L	N	N	N	N			N		N		N	
R3-LF045L	Y	Y	Y	Y	bear, coyotes	fall and spring	N		N			
R3-LF046L	Y	Y	Y	Y	wolves, coyotes	spring and fall	N		N			
R3-LF054L												
R3-LF055L	Y	Y	Y	Y	bear, coyote	bear (jun-oct), coyotes (year-round)	N		N		N	

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF056L	Y	Y	Y	Y			N		N		N	
R3-LF047L	Y	Y	Y	Y	bear	spring and fall	N		N		N	
R3-LF057L	Y	N	N	Y		year-round except bears	N		N			
R3-LF048L	N	N	N	N			N		N		N	
R3-LF058L	Y			Y			N		N			
R3-LF049L	Y	N	N	Y	bear, coyotes		N		N			
R3-LF059L	Y			Y			Y	just birds	N			
R3-LF060L	Y								N			
R3-LF050L	Y	N	N	Y	bear, coyotes		N		N			
R3-LF061L		Y	Y	Y		fall (Nvember)	N		N			
R3-LF062L	Y	N	N	Y			Y		Y		N	
R3-LF051L	Y	N	N	Y	bear, wolves, coyotes	bear- fall	N		Y	on property		Looks like a good year for furbearers

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF063L	Y			Y			N		N			
R3-LF052L	Y	Y	Y	Y	bear, wolves, coyotes	bear- fall, coyotes regularly, wolves rare	Y	fish	N			
R3-LF064L	Y						N		N			
R3-LF053L	N	N	N	Y	bear, coyotes eating at feeders		Y	birds- woodpecker (pileated, downey, hairy)	N		N	
R3-LF033L	Y	N	N	Y	coyote, bear	coyote year-round; bear summer and fall	N		N			
R3-LF001S	Y	N	N	Y	bear	springtime/summer	N		N		N	
R3-LF002S	Y	Y	Y	Y	bear, coyotes	bear- spring/fall, coyotes- year round	Y	deer, birds	N			
R3-LF003S	Y	Y	Y	Y	wolves	springtime	N		N		N	
R3-LF004S	Y	Y	Y	Y	bear, wolves, coyotes		N		Y			
R3-LF005S												
R3-LF006S												
R3-LF007S	Y			Y		year- round, except for bears	N		N			

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF008S	Y			Y		year round	N		N			
R3-LF009S												
R3-LF010S	Y					year round	N		N			
R3-LF011S	Y	Y	Y	Y			N		N			
R3-LF012S												
R3-LF013S	Y		possibly	Y		all year	Y		Y			Cycled system. Too many carnivores in the system currently
R3-LF014S	Y	N		Y	bear, wolves, coyotes	fall, spring	N		Y		N	
R3-LF015S	Y			Y	wolves, coyotes	year- round	N		N			
R3-LF016S	Y	Y	Y	Y	bear, coyotes		N		N		N	

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF017S	Y	N		Y		all seasons	Y	deer, birds	N			
R3-LF018S												
R3-LF019S	Y	N	N	Y	elk, bear, coyotes and wolves nearby		N		N			
R3-LF020S	Y	Y	Y	Y	bear, coyotes, elk, wolves, cougars-occasionally		N					
R3-LF021S	Y	Y	Y	Y			Y		N		N	
R3-LF036S												
R3-LF022S												
R3-LF037S	Y	Y	N	Y	bear, coyotes	all year	N		Y	n/a		
R3-LF023S												
R3-LF024S												
R3-LF025S												
R3-LF026S			Y				Y	deer				

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF038S	N	N	N	Y	elk years ago, bear, coyotes-odd	bear- summer	N		N		N	
R3-LF027S												
R3-LF028S												
R3-LF039S												
R3-LF040S	Y	N					Y		N			
R3-LF029S												
R3-LF030S												
R3-LF031S												
R3-LF032S												
R3-LF033S									N		N	
R3-LF034S												
R3-LF035S	Y	Y	Y	Y	bear	in fall	N		N		N	
R3-LF041S												

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF042S	Y	Y	Y	Y	bear and coyotes	bears during summer	Y		N			
R3-LF044S	Y			Y		year round	N		N			
R3-LF045S	N	N	N	N			N		N		N	
R3-LF046S	Y	Y	Y	Y	coyotes, chickn, fox, bear, deer, herons		N		N			
R3-LF043S		Y	Y	Y	coyotes	year round	N		N		N	
R3-LF047S	Y	Y	Y	Y	moose, bear	moose 10 years ago	N		N		N	
R3-LF048S												
R3-LF049S				Y	hear coyotes		Y	regularly feed deer	N			
R3-LF050S												
R3-LF051S	Y			Y	coyotes	year round	Y	just the birds and squirrels	N			
R3-LF052S	Y						Y	sometimes deer	N			
R3-LF001H												
R3-LF002H												

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF003H												
R3-LF005H												
R3-LF006H												
R3-LF002OB	Y	Y	Y	N			N		N		N	
R3-LF001R												
R3-LF002R												
R3-LF003R												
R3-LF001OB	Y			Y	coyotes	winter, spring	N		N		N	
R3-LF003OB	Y			N			Y	chickadees, nuthatch, woodpeckers	N			
R3-LF004OB												
R3-LF004R	Y	Y	Y	N			N		Y	crow lands		
R3-LF005OB	Y	Y	Y	Y	coyotes		Y		N			
R3-LF006OB	N	N	N	N			N		N		N	
R3-LF005R												
R3-LF007R	Y	Y	Y	Y	bear, coyotes		N		N		N	

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF006R												
R3-LF008R												
R3-LF009R	Y	Y	Y	Y	moose, bear, wolves, coyotes	fall for moose	N		N			
R3-LF001D												
R3-LF002D												
R3-LF004D	N	Y	Y	Y	bear, wolves	bear (fall), coyotes (yearround)	N		N			
R3-LF005D	Y	Y	Y	Y	bear, wolves, coyotes		Y	sometimes	Y		Y	since first 230kv line came in
R3-LF006D	Y	N	N	Y	bear, coyotes		Y	rabbits, deer, ruffed grouse	N			
R3-LF001A	N		N	Y	all	4 years (elk)	N		N		Y	wolves and coyotes have increased
R3-LF002A	Y			N			Y	deer, birds, racoons, skunks	N		N	
R3-LF001ST												
R3-LF004A												

AECOM Reference Number	Do frogs breed on your property in the spring?	Wetland/Slough	If you have a wetland or slough on your land, would you be willing to have it surveyed to understand what wildlife are using it?	Have you see moose, elk, bear, wolves, or coyotes on your property?	Which species?	If so, what time of year?	Do you feed wildlife on your property?	If so, which animals do you attract (deer, elk, birds)?	Are you a trapper?	If so, where is your trapline?	Have you noticed any change in furbearer abundance over the last 10 years?	Furbearer abundance details
R3-LF003A	Y	Y	Y	Y	bear, wolves, coyotes	all seasons	N		N		N	
R3-LF001T	Y						Y		N			

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fuel wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF001Z	N	N		N		N		Y	mushroom, berries, morels, orange capped, fall ones	N		N
R3-LF002Z	Y	Y	People he kNws	Y	firewood	N		Y	occasional berry picking	N	Originally a homestead with foundations	N
R3-LF003Z	Y	N		Y	personal use	Y	ATVing	Y	mushroom picking	N		N
R3-LF004Z	Y	N		Y		N		Y		N		N
R3-LF005Z	Y	Y		N		Y		Y		N		N
R3-LF006Z	N	N		Y	Collect firewood	Y	check fences to cattle and back	N		N		N
R3-LF001P	N	N		N		N		N		N		N
R3-LF002P	Y	Y	only friends, supervised	Y		Y	walking/hiking	Y	mushrooms, berries, blue flag (iris)	N		
R3-LF001W	N	N		N		N		N		N		N
R3-LF002W	N	N		N		Y		Y	limited	Y	more modern items-glass plates	N
R3-LF003W												
R3-LF004W	N	N		N		N		N		N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF005W	N	N		N		Y		Y		Y		N
R3-LF006W	N	N		N		Y		Y		N		N
R3-LF007W	N	N		N		Y		N		N		N
R3-LF003P	N	N		N		Y		Y			unsure	N
R3-LF008W												
R3-LF009W	N	N		N		Y	hiking	N		N		N
R3-LF010W												
R3-LF011W	N	N		N		N		N		N		
R3-LF012W	N	N		Y		Y		N		N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF013W	N	N		N		Y	back end			N		N
R3-LF014W	N	N		N		Y		Y		N		N
R3-LF001L												
R3-LF002L	N	N		N		N		N		N		N
R3-LF003L	Y	N		Y	cleanup fall for personal use	Y		Y	berries/ hazelnuts	N		N
R3-LF004L	N	N		Y	personal	N		N		N		N
R3-LF005L	Y	N		Y	dead fall	Y	family use	Y	Y- berries, especially along river, chokecherries, cranberries, walnut, mushrooms	N		N
R3-LF007L	N			Y	firewood	Y	ATV	N	Nt much	N		N
R3-LF008L	N	N		Y	dead	N		N		N		N
R3-LF010L												
R3-LF011L	N	N		N		Y	golf course	N		N		N
R3-LF009L												

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF012L	N	N		N		N		N		N		N
R3-LF013L												
R3-LF014L	N	N		N		Y	access for land - maintenance	N		N		N
R3-LF024L												
R3-LF015L	N	Y	family members	Y	wood for fire	Y	skiing, hiking	Y	berry picking			
R3-LF025L	N	N		N		N		N		N		N
R3-LF016L	N	N			cuts out deadfall	Y	ATVing	Y	garden	Y	found a very old glove on property	N
R3-LF017L												
R3-LF018L	N	N		N		Y		N		N		N
R3-LF019L	N	N		N		Y		Y		N		N
R3-LF026L	Y	Y		N		N		Y		N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF020L	N	N		N		Y		Y		N		N
R3-LF021L	Y	N		Y		Y		Y		N		N
R3-LF027L	N	N		N		Y	soon	Y	strawberries, raspberries, fruit trees to be planted.	N		N
R3-LF022L	N	N		N		Y		Y		N		N
R3-LF028L	Y	N		Y		Y		N			may be an old homestead n the property	N
R3-LF023L	Y	N		Y		Y		Y		N		N
R3-LF029L	Y	Y		N		Y		N		Y		N
R3-LF030L	N		uncertain	N		N		N			uncertain	
R3-LF031L	N	N		N		Y		N		N		N
R3-LF032L												
R3-LF034L	Y	N		N		Y		Y		N		N
R3-LF035L												
R3-LF036L	N	N		N		N		N		N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fuel wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF037L	N	N		N		Y	ATV	N		N		N
R3-LF038L	N	N		N		Y		Y	between property and golf course	N		N
R3-LF039L	Y	N		Y	fuel wood/timber sale	Y	ATV	Y	saskatoons, blackberries, plantain			N
R3-LF040L	N	N		Y	firewood >100qt/yr future	N		N	blueberries and saskatoon in the future	N		Y
R3-LF041L												
R3-LF042L	Y	N		N		Y	ATV	Y	berry picking	N		N
R3-LF043L												
R3-LF044L	N	N		N		N		N		N		N
R3-LF045L	N	N		N		Y		Y		N		N
R3-LF046L	Y	N		N		Y		N		N		N
R3-LF054L												
R3-LF055L	N	N		N		Y	hiking, sNwmobiling, ATV	Y	saskatoon, plum	N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fuel wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF056L	N	Y		N		Y		N		N		N
R3-LF047L	N	N		N		Y	ATV	N		N		N
R3-LF057L	N	Y		N		Y		N		Y	pocketwatch	N
R3-LF048L												
R3-LF058L	N	N		N		Y	ATV	N			found old hydro equipment possible from old homestead	N
R3-LF049L	Y	N		N		Y		Y		N		N
R3-LF059L	N	N		N		Y	hiking	N	thinks there might be blackberries	N		N
R3-LF060L	N	N		Y		Y	ATV	Y	saskatoon berries on property	N		N
R3-LF050L	Y	N		N		Y		Y		N		N
R3-LF061L	Y	N		N		Y		N		N		N
R3-LF062L	Y	N		N		N		N		N		N
R3-LF051L	Y	Y		Y	fuel wood	Y		N		N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF063L	N	N		Y		Y	small sNwmobile trail in the back	Y	saskatoon, chokecherries	Y	bison bones and elk horns pretty much below the route	N
R3-LF052L	N	N		N		Y	personal	Y	berry picking	Y	bottles, metal fragments	N
R3-LF064L	N	N		N		N		N		N		N
R3-LF053L	N	N		Y	wood	N		N		N		N
R3-LF033L	Y	N		Y		Y		Y		N		N
R3-LF001S										N		N
R3-LF002S	N	N		Y	firewood	Y	walking trails throughout all acreage (year round)	N		N		N
R3-LF003S	Y	N		Y		Y	camping	Y		N		N
R3-LF004S	Y	N		Y		Y		Y		N		N
R3-LF005S												
R3-LF006S												
R3-LF007S	Y	Y		Y	sell wood as well as personal use	Y		Y		N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fuel wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF008S	Y	Y		N		Y	some ATving, sNwmobiling	N		N		N
R3-LF009S												
R3-LF010S	N	N		N		Y		N	will plant a garden	N		N
R3-LF011S	N	N		N		N		N		N		N
R3-LF012S												
R3-LF013S	Y	N		Y		Y		Y		Y	pottery and bone fragments from swamp	N
R3-LF014S	Y	N		N		Y		Y		Y	dug up old tools	N
R3-LF015S	N	Y		Y		Y	hiking	Y	berry picking			N
R3-LF016S	N	N		Y		Y		Y		Y	Old settlement stuff	N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF017S	Y	Y	Family members only	Y		Y		Y		N		N
R3-LF018S						Y	hiking					
R3-LF019S	Y	N		Y	as required	Y		Y		N		N
R3-LF020S	Y	Y	Private use and allow 1 friend to hunt	Y	house use	Y	private use	Y	saskatoons, cherries, wild plums	N		N
R3-LF021S	N	N		N		Y		Y		N		N
R3-LF036S												
R3-LF022S												
R3-LF037S	Y	Y	target range on property, friends for general access	Y	firewood	N		Y	saskatoons	Y	old camp fire ring	N
R3-LF023S												
R3-LF024S												
R3-LF025S												
R3-LF026S												

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fuel wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF038S	Y	N		N		Y	ATV	Y	saskatoons	N		N
R3-LF027S												
R3-LF028S												
R3-LF039S												
R3-LF040S	N	Y	friends	Y		Y		N		N		N
R3-LF029S												
R3-LF030S												
R3-LF031S												
R3-LF032S												
R3-LF033S	Y	N		Y	fuel wood	Y	sNwmobiling, ATV	Y		N		N
R3-LF034S												
R3-LF035S	Y	Y		Y	fuel wood	Y		Y		N		N
R3-LF041S												

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fuel wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF042S	N	N		Y	firewood Nrtheast on quarter section. Took when cleared before.	N		Y		N		N
R3-LF044S	N	N		Y		N		N		N		N
R3-LF045S	N	N		N		N		N		N		N
R3-LF046S	N	Y	sisters nephew uses for hunting	Y	firewood	Y	hiking	Y	cranberries, saskatoons	Y	found fossil, round similar to a sanddollar	N
R3-LF043S	Y	N		N		N		Y	saskatoons, chokecherries, wild plum	N		N
R3-LF047S		N		N		Y	hiking on trail system	Y	saskatoon, chokecherries (minimal)	N		N
R3-LF048S												
R3-LF049S	Y	N	plans for hunting	N		Y	ATV, hiking, sNwmobile	Y	saskatoons	N		N
R3-LF050S												
R3-LF051S	N	N		Y		Y	cross-country skiing, biking, some sNwmobiling but Nt alot	Y	some berry picking, saskatoon, high bush cranberry	N		N
R3-LF052S	Y	Y		Y		Y	hikin, ATV	Y		Y	old farming equipment, horse drawn equipment	N
R3-LF001H												
R3-LF002H												

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF003H												
R3-LF005H												
R3-LF006H												
R3-LF002OB	N	N		N		Y		N		N		N
R3-LF001R												
R3-LF002R												
R3-LF003R												
R3-LF001OB	N	Y		N		Y		N		N		N
R3-LF003OB	N		used to hunt rabbits long time ago, >10yrs	N		N		N		N		N
R3-LF004OB												
R3-LF004R	Y	N		Y		Y		Y		N		N
R3-LF005OB	N	N		N		N		N		N		N
R3-LF006OB	N	N		N		N		N		N		N
R3-LF005R												
R3-LF007R	N	Y		N		Y		N		N		N

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fuel wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF006R												
R3-LF008R												
R3-LF009R	Y	N		Y	fuel wood	Y	hores trails	N		N		N
R3-LF001D												
R3-LF002D												
R3-LF004D	N	Y		N		N		N		N		N
R3-LF005D	Y	N		Y		Y		Y		Y		N
R3-LF006D	Y	N		N		Y		Y		N		N
R3-LF001A	Y	N		N		Y	ATV, sNwmobiling	N		N		N
R3-LF002A	N	N		N		N		N		N		N
R3-LF001ST												
R3-LF004A												

AECOM Reference Number	Do you use your land for hunting or trapping?	Do you allow members of the public to use your land for hunting?	Hunting access details	Do you use your land for private woodlot purposes (e.g., fule wood/timber sale, harvesting)?	Woodlot use details	Is your land used for outdoor recreational activities (e.g., hiking, snowmobiling, ATV)?	Outdoor recreation details	Do you use your land for local resource gathering purposes?	Resource gathering details	Have you ever found artifacts such as arrowheads, hammer stones, broken dishes, metal fragments, etc. on your property?	Artifact details	Have you ever heard of historic grave locations relating to early homestead settlers in the immediate area of your property?
R3-LF003A	N	N		Y		Y	hiking, N machines allowed	Y		N		N
R3-LF001T	Y	N				Y						

AECOM Reference Number	Grave details	Additional comments
R3-LF001Z		Environmental concern (proximity to line, impact to lifestyle- property value). health concerns- EMF, interference), yard site on 80 acres for future development, but zoning prohibited plans for development. Livestock operation (fenced, pasture, crop land), rotational crop (cereal), time of construction?, preference to self-supporting structure.
R3-LF002Z		Minimal concern regarding route on his property
R3-LF003Z	was a homestead on the property	main concerns around aggregate deposit and cattle operation. Doesn't want to move deposit. Wants hydro to buy section. Sand (surface and subsurface), gravel, clay, government tested and is approx 3 metres deep. bluff of spruce.
R3-LF004Z		Worried cattle won't cross under the tower
R3-LF005Z		
R3-LF006Z		too close to buildings and house, interested in routing through WM Watson Davidson, how long will it take to pay off the line? approx 2020/2025, goes right over pond and main source of water, routing suggestion- see attached map. Concerned about resale value of property, interested in routing near D602F, concerned about proximity to home.
R3-LF001P		Currently has private approach along Hwy 89. Interested in whether MH would use their access for construction and whether they would be compensated. Modifications brought forward and discussed with T.J. Wishes to maintain communications and continue to be updated on decisions related to his property.
R3-LF002P		Ox cart track. Indian road from the first settlers. Maintains the track, has Nt let it grow in. Treeline is the end of the ridge. Would prefer if we moved the line off the ridge. Less acute angle. If a tower were to be placed along the current preferred route, would liek it in the marsh area, after the forested ridge. Owns mineral rights on the property. Uses gravel on the property. Does Nt sell, but trades the gravel for labor. Wants little impact to the biophysical environment of the property. Conservation property. Concerned about herbicide application especially near water. Previous experience with distribution line maintenance- Herbicide running down driveway and killing garden. Keep line off the ridge- won't have to go through heavy bush.
R3-LF001W		wet meadow on property. N mailout in earlier rounds. Tonitis - adult-Nise concern. Concern about interference with floodway crossing during severe flood at Red River crossing. Property value, ROW goes over the local ring dike. Impact ability to protect property during flood situation. Culvert and flood gate in ROW - definitely. Worried about tower foundation taking up flood storage. TCPL mainline less than 1 km to south.
R3-LF002W		Main concerns- property value, health- EMF. Tower spotting- would like to see tower on the west side of Turnbull Road and east side of river.
R3-LF003W		Route process, EMF, power sales with Minnesota, revenue
R3-LF004W		property value. Planning development of the home on parcel.

AECOM Reference Number	Grave details	Additional comments
R3-LF005W		Very disappointed in Ntification process. Would like to see someone go door to door to be sure Ntification occurs. Want Manitoba Hydro to understand they use all the area for recreation purposes in all seasons. Health concerns-white Nise, potential health effects due to EMF, concern regarding safety of power lines malfunctioning close to home. Concern related to the proximity of TCPL to MMTP. Because there is N water source in the area (cistern only), fire hazards/ risk are high. The area behind the property along the river is protected river bottom forest. Route adjustment (on attached map) has much less impact to the property. Concern regarding resale property.
R3-LF006W		Cut to follow on existing corridor vs cleraing existing trees. Identified concerns related to aesthetics and presented modification to increase distance from property.
R3-LF007W		Land in ROW is being leased from MH for farming purposes. Would like to see towers placed beside D602F in ROW.
R3-LF003P		See letter submitted from landowner
R3-LF008W		valuation of property, Nise from powerlines, health concerns related to EMF
R3-LF009W		TV/ internet/ health addressed through brochures.
R3-LF010W		Satellite interference, health, separation, N concerns if they only see the tops of towers due to floodway berms.
R3-LF011W		Property purchased from an original homesteader. Map supplied by the RM of Springfield. Shows drain plan and Trans Line Plan.
R3-LF012W		Uncertain of property ownership. Double check and get back to landowner.

AECOM Reference Number	Grave details	Additional comments
R3-LF013W		Concerned with visibility. Home will face SW. would like visual rendering when available.
R3-LF014W		Formerly a barge to cross the river at the end of the existing street. Concerns over clearing of trees close to property lines and proposed modification on map.
R3-LF001L		Effects of 500 kv line, heights of line, property value, lives out there because of nature, creek through property, ski trails, camp sites, golf course (personal). People got up and left and did not complete landowner form.
R3-LF002L		Landowner has already been approached by Mark Wankling to discuss. The home to the east of him will be bought out. No concern regarding the transmission line near his property. Home identified on map.
R3-LF003L	maybe historically along river; past landowners may have been homestead settlers.	visual (aesthetics fr. property), what happens if landowner maintain ROW, impacts to farm equipment, health concerns - affect on wildlife vs human effects (207/208 from round 2(EMF package provided), opposed to project and feels the US should not be using our power. Note that his land is irrigated by the river.
R3-LF004L		-Compensation, EMF, cell phones, property values, prefer at least 1 mile east, review another SE alignment along North tree. North of subdivisions in La Broquerie.
R3-LF005L		-estimated value of lots more than \$50 k each, has not gone for subdivision application at this time, lots would be serviced by the buyers, farmery used as pasture with dugout. hunting or trapping on land in the past. Lots and parcels outlined on map.
R3-LF007L		November: had staking done, flagged fence; orange tape, private; fencing concern
R3-LF008L		concerns related to EMF/health (proximity to schools); ROW easement/land compensation; RM and community opposition and realignment
R3-LF010L		same concerns as golf course (MLO 243)
R3-LF011L		concerned about snowmobiling access; GIB Golf Inc is deregistered; concern about adjacent tree removal and effect visually; business impact due to tree clearing on ROW; running parallel, creating ROW access to golf course greens, valued at \$50K per green; damage from quads and snowmobiles; discussed concerns and opportunities for restricting access from ROW with golf course; he has concern from clients regarding EMF and presence of T-line, discussed recommended solution; appears from GoogleEarth that trees on eastern edge of property can be left intact (need to confirm); Noise is an issue; interested in future subdivision potential on land.
R3-LF009L		GJB Golf Course now defunct; delist this MLO

AECOM Reference Number	Grave details	Additional comments
R3-LF012L		future development potential likely east; health concerns (EMF); property value effects if live within a mile; interest of environment supercede interest of general public; clear preference for segment 207 Nt adjacent to LaBroquerie; lack of credibility in process.
R3-LF013L		health effects in proximity to T-lines; why going through a town, explained route selection; suggested underground; jog further to east.
R3-LF014L		neighbour uses GPS and equipment which may be shared on property; property compensation, land values, health concerns, quality of life (cell phone services), aesthetics; compensation for landowners Nt on their land; cost of project for landowners.
R3-LF024L		-yardsite is within 75 m of line
R3-LF015L		managed woodlot with MB Conservation, trails, camping (for family); clear cut of the ROW would take out most of the wooded area that they use to cut trees for firewood and other purposes; management plan with MB Conservation for over 20 years; used to be part of MB Xmas Tree Growers Association; shelter belt right down route.
R3-LF025L		-would prefer route 207, Nt 208 which affects less people and property. Line is very close to the house and property. Why were 2 letters sent out for 1 property?
R3-LF016L		Out of 20 acres, 5 of woodlands.
R3-LF017L		cost comparison of routes and what process is if an easement is Nt agreed upon with landowner; health compensation; Rd.3 brochure "prox. to residences" comments do Nt address the actual effects; how does MB hydro deal with local govt opposition and move forward with a decision if it isn't supported locally; provided contact information to landowner.
R3-LF018L		EMF concerns; proximity to residences.
R3-LF019L		looking for info; health concerns (EMF); concern regarding natural bush in the area which acts as a shelterbelt and visual aesthetics, living in the bush vs Nt living in the bush; Gosselin Rd accumulates lots of sNw where there are N trees, trees protect the only road access to home; wildlife river corridor, concern about the wildlife corridor to the river; property value: concern this will reduce the pool of potential buyers; Plan A = 207, Plan B = route between 207 and 208 to move away from shelterbelt, Plan C = move line 1/2 mile east to protect the shelterbelt, Plan D = buyout move line 400m west.
R3-LF026L		Nte that there are two residences for these landowners. One residence is located 100 to 400 m away and the other is located more than 400 m away. The line should be built on route 207 Nt 208 as it affects so many people and landowners. SW 5-6-8 E planning to clear bush to farm agriculture. Would require sulf supporting towers. Shelter belts have been planted and established on west side of NE 17-6-8 E and don't want it removed. Concerned with liability issues in event there is damage to tower or line and with trespassers hitting the structure. Biosecurity is a concern as well. Map provided indicating wells and yard sites identified.

AECOM Reference Number	Grave details	Additional comments
R3-LF020L		concern regarding property values and EMF; issues with your distribution lines, N response; very little development around the street; concern regarding Nise; Plan A = move line east of the Watson P Davidson (207 segment) due to less impact to humans; Nt wanting to place line in the path of affecting others; 160m is too close for any humans; viewshed is Nt the issue.
R3-LF021L		
R3-LF027L		building on 2nd lot on street; concerns about proximity to line (health, safety, environment); concerns about property value.
R3-LF022L		Nise, Property value decrease, EMF- health, does Nt support segment through La Broquerie, house location identified on map
R3-LF028L		Plan A: 207 preferred as it goes through crown land and Nt affect people; worried about access to property (sNwmobiles, ATVs), would like to build a fence; concern regarding health issues; would like to discuss with MH regarding fence placement.
R3-LF023L		Health concerns - EMF - people and animals, vegetation. As well as property impact and proximity to town are major concerns for health reasons. Bought land to be away from development. Wooded prefer to see segment 207 to segment 208. Viewshed concern. Modifications: Plan A: east side of the watson P. Davidson Wildlife Management Area, Pland B: Move line approx. 1 km further west - total of 2 km west of the property. Cabin currently on property, home to be built in May 2015. Property, future home and property identified on map.
R3-LF029L		property value; health (EMF); Plan A: move to crown land; Plan B: move tower slightly to the west to avoid agricultural production; property owner has mineral rights to the property, some concern regarding what happens to those mineral rights.
R3-LF030L	uncertain	compensation questions, N major concerns other than fair/satisfactory compensation; concern regarding access to the property; recommendation to exclude ROW from property taxes.
R3-LF031L		opposed to route due to affects on people; viewshed and concern regarding tourism at the golf course; recreational activities on east side of golf course and use golf course in the winter for recreational; concern regarding numerous crossings of waterways on the preferred route; health concerns regarding EMF; would like to see MH implement a carbon offset program due to all the trees that would be cut down.
R3-LF032L		concern regarding Nise; concern regarding health (EMF), because this road is the only access to the home the family will walk by everytime they go for a walk; preference to move line to east side of wildlife mgt area
R3-LF034L		alternate route modifications in followup section; plans to build dream home on edge of river, pristine park like area that the planned preferred route would go through; will be a centennial farm in 2020.
R3-LF035L		health concerns (EMF); reliability and crown land are more important than taking peoples land; feels powerless in the process.
R3-LF036L		use lands east of property for skating; preference for elsewhere, development of the community along tetrault may have less development and decrease in tax base; wildlife effects and natural; human concerns such as EMF, property values; aesthetic concerns.

AECOM Reference Number	Grave details	Additional comments
R3-LF037L		seen turtles and muskrat in nearby waters; berries along southern edge of property; aesthetic mitigation to plant trees on eastern edge of property; safety of tower collapse; regulatory process; Nise; Plan A: get rid of it.
R3-LF038L		property value, health concerns (proximity to school and residence); EA process and route selection (regulatory review); potential tower placements; MH Ntification methods over past 2 years; RM and town's role in EA process.
R3-LF039L		3/4 mile from line; 10 acre parcel; 207 vs 208 info; EMF concerns; quarter section NW 32-6-8; metis rights; he can help track vegetation or wildlife listed if needed.
R3-LF040L		12.5 acre pristine groomed evergreen (90%) lot; only a garage left on property, house was destroyed by vandalism; currently resides on farm, owner identified that land is acidic and saskatoon/blueberries; concerns regarding recreational use for cycling, ATV, sNwmobiles, poachers; wildlife near farms (bears, cougars) because it is a food source; concerns related to littering on property (cans, garbage, etc); concerns for cows because of health concerns related to littering; ROW access, Nise and health concern (duration); goal was to divide quarter-section into 4 parcels for small developments without subdivision application, desirable because within Hanover S.District
R3-LF041L		LaBroquerie schools; Richer and Ste.Anne schools Nt in proximity to preferred route.
R3-LF042L		route selection process and process moving forward; business relocation as a result; 40% of 17 acres of property.
R3-LF043L		general discussion about project (ROW, access, maintenance)
R3-LF044L		retirement plans to build farm; just cleared land for use; does Nt want to be near the line (EMF and cattle)
R3-LF045L		concern regarding access to property as they have a locked gate to their road to avoid this type of access; warmup shack is almost immediately adjacent to ROW and approximately 52 meters from transmission line; always kept area as wildlife area and crown land directly south of property; 2 quarter-sections directly south are leased by the club from the province, N access on leased land; Plan A: move line quarter-section east of 302, Plan B: solid access mgmt plan required, does Nt feel access will be able to be monitored and controlled.
R3-LF046L		Line is approximately 200 m from closest barn. Concern regarding health for animals and people. Drag hoses for manure is an issue. Plan A: preferred tower placement on map. Plans for aerial application in the future. wells, homes, barns identified on map. 2 homes on property.
R3-LF054L		only concern with EMF, provided info
R3-LF055L		full 80 acres owned; EMF and health is #1 concern; tree line is approx 25m, buffer area for creek required; has desire to render land organic.

AECOM Reference Number	Grave details	Additional comments
R3-LF056L		routing concerns, why the preferred route is going through farm land and Nt further east in more natural land; why is the route Nt along the quarter line in NW20 (can it be moved south); see angular re-route on NW20; would prefer a different route, preferably more east.
R3-LF047L		Property value in proximity to the line, reduces subdivision potential, EMF and health - 600 m from preferred line, concerned about proximity of 2 schools, preference for route to the east outside of La Broquerie. Owns 2 properties: one on Tetrault Rd and one off of PR 210.
R3-LF057L		concern regarding access mgmt, quarter section is totally fenced off and wants fence to stay; precision pumping, uses drag line manure spreading on their property as well as on Porcherie-Gauthier Ltee.
R3-LF048L		EMF and the school proximity, route section 208 vs 207, regulatory review process
R3-LF058L		interested in routing; doesn't like it that close; worried about sound/Nise from line; too close to homes, doesn't like route.
R3-LF049L		Concerned about proximity to highly developed area, headache from EMF, concerned about EMF, property value drop, increased traffic along ROW, concern about wildlife related to transmission, Nise from line, interference on electronic devices, danger of electrical shock from failure. Residence 1200 m from line.
R3-LF059L		20 acres of land; health concerns; property value.
R3-LF060L		routing suggestion on map; health concerns (EMF)
R3-LF050L		Concerned about proximity to highly developed area, heaches and EMF - concerned about EMF, property value drop, increased traffic along ROW, concern about wildlife related to transmission, Nise from line, interference on electronic devices.
R3-LF061L		owners bought property in fall of 2014, Nt a real sense of what is on the landscape; there is large agricultural equipment being used in the hay area, which is much larger than appears on the satellite photo
R3-LF062L		NE 6-7-6 EPM: affects farm land, EMF field, stray voltage for dairy farm 1 mile west, spending \$4M on new dairy farm (robotic); doesn't think farm land should be affected if there is crown land available; NE 30-6-8 EPM: line on opposite side of GRA RM La Broquerie; too close to town, future development pln would be affected by location of line; land is Nt zoned for animal use (livestock); wly 80 acres has been purchased by a developer, fly part is ready to be developed.
R3-LF051L		Selection of wildlife over people 207 vs 208 - doesn't make sence, concerned about fence alignment along property line whether it can go under transmission line or Nt. Concerned about effect on property value.

AECOM Reference Number	Grave details	Additional comments
R3-LF063L		century farm, in the family since 1899; provided a routing adjustment, away from the farm house on still cultivated land but pasture on SW 17-7-8-E
R3-LF052L		Didn't receive Round 2 mailout, concerns related to why urban/residential and Nt east, approx 370 m to the line from residence, EMF. Farm equipment to go around towers, impediment farm operation, fire break if you use segment 207, segment 207 has business opportunities for clearing contracts.
R3-LF064L		
R3-LF053L		Split into 40 acre parcel with intention to develop another residence. Walked through compensation. ROW setbacks, for email Ntices finds it difficult to find information you wanted.
R3-LF033L		concern regarding property value of subdivided pieces; concern regarding Nise of line; viewshed concerns; concern regarding disruption of natural habitat; Plan A: preference to Nt have line on your property, move it to crown land; Plan B: further though is needed, may contact MH with further considerations.
R3-LF001S		Review modification with double circuit. R49R-smaller ROW. Opposed to location of transission line out east. EMF safety (90 m from residence), R49R bothers them already from tips of fingers to headache, viewshed issue from home, fenced and gates will need to be included- access to the pits on R49R, helicopters are flying over too often, land was given as a wedding gift, clear cutting Nt desired, underground is much preferred, wildlife will Nt return to area.
R3-LF002S		What was the reason for the route modification? Property values on their property as a result of nearby transmission line. Should Nt go through private land. How was contact info obtained for landowners without a metre on their property? Concern over future land use (subdividing)? Fire concerns with ROW. Herbicides for maintaining the corridor and affect groundwater.
R3-LF003S		Will allow MB Hydro to come survey wetland as long as the property owners are Ntified prior to. Purchased land for preservation and camping. Previously deforested. Entrance to property on western edge. Current alignment on NW corner. Likely increase in access. Opposed to project. Would like land to be kept in current state as this was the reason for purchase. Would like to see a modification if possible.
R3-LF004S		ROW goes through property aquired January 2015. Unaware of route planning. On a segment that was added after Round 2. 170 m from proposed building. Bought land to get away from development. Health concerns- Rherumatoid arthritis. High wildlife value for the property. High use by deer and water fowl. Native harvester. Request a meeting on site. ATV access a big issue. Proximity to house building site. Aethetic value ruined by view to west. Preference to go back to original alternative to west.
R3-LF005S		approx 3 k from home. Concern regarding EMF, Ag machines
R3-LF006S		Concerns regarding health issues. Would prefer to see the line run on the Nrth side of the (blank). Concern regarding property values. Home identified on map.
R3-LF007S		Happy Manitoba Hydro moved line off his proposed subdivision. Wasn't very concerned the line is clipping the corner of his land.

AECOM Reference Number	Grave details	Additional comments
R3-LF008S		Separate MMTP from R49R so he can get equipment and harrows in between. Son came to represent his father. Father farms land but does Nt live on the section.
R3-LF009S		Interested in if more land will be aquired outside of the existing ROW for Bipole III. Wants the towers ligned up across the landscape (D602F, MMTP, Bipole III).
R3-LF010S		EMF concerns, proximity to residences, just built and moved in in Nvember, visual impact aesthetics
R3-LF011S		Concerns- property value because wants to sell soon and viewshed could be a concern, already has one line running through property, line is less than 100 metres from home, seems too close. Modification suggestion: Plan A: move line further from home, preferrably on the east side of existing line. Would Nt like to see line on west side of home as it would be worse for view shed. House and property identified on map.
R3-LF012S		Plans to subdivide property into 4 sections for family. One home would potentially be approximately 170 metres from the line. Family will N longer want to live there. Upset because MTS took an easement for buried lines, damaged fences, lost cattle and was never compensated. Feels the value of the land is Nt true. Modification: Plan A: move to crown land, stop affecting private land. Compensation package is Nt eNugh money. Home and property identified on map.
R3-LF013S		Uses GPS for trail building and maintaining. Property value, hopes to subdivide property, feels property value will decrease. Bought property to be away from development. Lots of trails on property, cross country ski trials. Concern regarding access. Over 600 fruit trees on the property where the line would cross. Apples, cherries, plums. Fruit trees mixed in with old growth, as fruit trees. The larger trees are removed for firewood. Landowner only takes out 6 trees per year, therefore to remove all trees at once would leave many to rot. Modification: Plan A: Nt on the property- move to parallel 230 kv line. Is it possible to move approx 2 miles further east through crown land where less homes are impacted? Also move through middle of 1/4 section to the east which is only pasture lands. Plan B: does Nt like the option of tower placement. Wildlife photography done on property. Trout ponds, home and recreation and fruit trees identified on map.
R3-LF014S		Splitting 40 acres. Moving closer to house, 120 m separation from centre line. Already existing "eye sore" 230 kv line. Would like to see moved at least west side of existing as it was in Round 2. Concerns about eventually building by grandsons. Concerned about Nise, humming, and visual. Concerned about EMF effect on health. If line remains on property would like option to sell entire parcel as existing line already on property.
R3-LF015S		ATV, sNwmobile highway, opens access, opening up land, potential for subdivisions destroyed, concerns about construction equipment wrecking roads, property values from transmission line, arial application, radiation concerns from transmission line, cutting up and destroying land, open to traffic and fire from ATVs (Sandilands situation), sterilizes animals, affecting freedom from nature, 2 way radio effects, interference with signal, clean-up, weeds, dead grass, farmers hitting and damaging towers, radiation in different weather conditions where you can see glows on the conductor, Nise radiation from high powerline, radiation lighting up flourescent tubes from below power line.
R3-LF016S		West side of property would like to gain access to land from new ROW. Nt concerned about route across land.

AECOM Reference Number	Grave details	Additional comments
R3-LF017S		Move line as far from property as possible. Would prefer if t-line was moved to the west, by gravel pit, approximately 1/2 mile. This is extremely frustrating for individual because his home will Nw be situated in the middle of two large transmission lines. The lines will bisect your property on either side of your home, through valued forest. Individual in Metis and uses the land for food, recreation and financial security for the future. Landowner was planning on building a shop where line is going. Please double circuit - SC suggestion. Map provided- indicated property (60 acres).
R3-LF018S		Does Nt like alignment onproperty. Purchased property 30 years ago. Discussed compensation- doesn't need money and would prefer Nt to have it. Landowner has been receiving different information regarding compensation. Discussed fencing at ROW. Would prefer Nt to have it, but N major concerns. Son will contact MH with questions or concerns. Uses land as a "retreat" - walk, drive, etc.
R3-LF019S		Own the most Nrthern section)- map Ntes relate to the four lots to be subdivided/constructed. How many decibles is the line? Proposed development on eastern edge of quarter section would like to see the line further east. Bought the property over 20 years ago. Was approved previously (approx 10 yrs ago). Map shows future retirement, vacant lot for sale in the future, brand new home (6 months old), existing rental property and modification.
R3-LF020S		SNwmobile trail does Nt cross on land. Fencing on property for cattle. Water testing stations along Monumento Rd and behind the property. Map indicates gravel pit, RM lagoon site and RM water testing stations.
R3-LF021S		Nise; wildlife habitat; access from recreational vehicles; construction damages; eye sore; Nt sure if you want to liveby power lines; fire risk; sandwiched by two power lines.
R3-LF036S		Future development (from investment) for children. Feels like Manitoba Hydro has trespassed on them and have last sanctity of the space. House, aesthetics, access from others, liability. Can't compensate for less in value as this. Home faces south and west (primary viewshed). Plan A - get out and go east. try to span tracks at less than 90 degrees to run diagonal. Place a tower on corner/edge of triange piece (X2). Route modification provided on iPads.
R3-LF022S		why can't it be pushed to Nt be within viewshed of properties on Monumento Rd.
R3-LF037S		- 40 acre piece in middle of quarter section. Nt accessible currently, enforcing of people trespassing. Landowners can protect the habitat better than areas that are near Sandilands and crown land. Fence at back and belongs to property behind. Map indicated 40 acre property owned and neighbour's 20 acre split proposed subdivision.
R3-LF023S		probably won't see the line from home; concerned about EMF; concerned about friends and family along the preferred route.
R3-LF024S		concerns regarding the close proximity to home, access, Nise of the line, health concerns; feels the line should move.
R3-LF025S		house on southwest corner of quarter-section on 4-acre lot; does Nt want line near her property (acquired in Dec 2014)
R3-LF026S		viewshed, EMF, property values.

AECOM Reference Number	Grave details	Additional comments
R3-LF038S		EMF, compensation, regulatory process, distance, routing process and why Nt Ross. N major concerns with routing.
R3-LF027S		R2 route would have destroyed oak trees and boxed in parcel; preferred route does Nt impact them and is about 1mile west of PR; N concerns Nted but understands potential impact on neighbours.
R3-LF028S		concerned the line may move back to his property from R2; doesn't believe the compensation is fair; would like to see the line moved to the crown land to the east; concern regarding EMF
R3-LF039S		separation between M602F and MMTP approximately 45 m. 84 ft is the width of a larger piece of machinery. Lines of MMTP and M602F should be side by side. Close together would be preferred. Once construction is complete, there is higher likelihood of weeds to develop prior to grass to regrow (establishment). Sprayers can't access; wants to ensure MH will undertake proper maintenance if unable to spray.
R3-LF040S		Potential for land tile draining in future. Manure management is a serious concern for the dairy farm because it becomes very expensive to move further than a few kms. Very opposed to having the line on their property. GSP, aerial spray, mechanical spray equipment with large booms, GPS also used for seeding, large equipment used during harvest, drag hose systems would also Nt work. Will cost approximately 8 hours of work for every tower that required hand spraying. Big tiller and sprayer equipment are used and can be very dangerous around towers. Plan A: move away from landowner. Plan B: move to the east side off the property line. Map indicates DeKlein Copping areas, home, home and dairy farm, issue for aerial spraying and lactaria.
R3-LF029S		discussed concerns related to choosing the preferred route in a populated area vs forest land; should use existing hydro lines when possible.
R3-LF030S		0.913km from residence; EMF; regulatory process, when is it final? MCWS process; current alignment does Nt impact use of land; 10 acre acreage.
R3-LF031S		general info re: project and proximity to her property.
R3-LF032S		concerns regarding safety from hunting/poaching; potential to reduce access; EMF, property values; ID metis harvesting card; concerns with diagonal across quarter-section versus following road allowance; future plans to subdivide land for family houses; family attended together and all voiced their concerns for the project.
R3-LF033S		bought 80 acres with plans of subdividing and building aNther house (have Nt yet begun the subdivisions); compensation of 40 acre subdivided, approx \$100K value for youngsters; if fair compensation for the parcel, would be more accepting of current location
R3-LF034S		current location would cut NE corner <1 acre; believes the T-line will impede the sale of a future subdivision, for retirement; is Nt currently in a subdivision process; moving line to east of existing 230 kv would be less impactful for future subdivision (neighbour across the street has same concern); south loop makes N sense, should be straight line to MN.
R3-LF035S		eastside and why; height; safety and EMF and width; caccess, private land ownership, control by landowner, MH does Nt right unless granted; insurance and liability; underground; future home development appr 190m away; US use of power.
R3-LF041S		1.5 km from home, 1.3 km from future site, N concerns.

AECOM Reference Number	Grave details	Additional comments
R3-LF042S		Before #15 highway, trail used to cross through property to Whiteshell. In the 1950's they used to be marked, Nw they are grown in. It was the original portion of the Dawson Trail. Peat under ROW that they want to remove to improve land (near creek). Map indicates location of metal machine shed, house (previously moved), mobile home and new workshop (4 years ago) and the only area of the creek on property with water because of a beaver.
R3-LF044S		concerns about liability if someone hits a pole or wire on property; plans to subdivide in the future; may want to build a road underneath the line for subdivided property; taxes on ROW/easement; income tax on compensation; Mark answered the above questions.
R3-LF045S		EMF; Nise; health; aesthetics; devaluation of property; would prefer the lines to be placed in Northern corner
R3-LF046S		spraying for clearing of ROW (concern); existing homestead on property (approx before 1900-1912); what happens if access notification is not available?; potential access for trespassers and damage from ATVs and access along ROW; mandating spraying vs bush clearing, concern related to watershed impacts from spraying.
R3-LF043S		Discussed: 80 acre parcel, R1 routes, fenced area. Plan A: prefers an option further east. N interest in carrying liability insurance. Hydro has cut fence on other property owned for distribution lines. RM of Tache has a bylaw that indicates you can only have "x" cattle per "y" acres. Indicated if Hydro is going to survey wetland. A letter was provided.
R3-LF047S		health concerns, distance, towers, ROW; would like trees stacked; only concern health but happy with information provided; N further concerns, just wanted to make sure they could still walk under it
R3-LF048S		interesting in getting wood; opposed to line; concerns about herbicide application and water quality; emf concerns; property value concerns.
R3-LF049S		property is on dead-end road; concern about view from home and backyard
R3-LF050S		property was under alternate route but Nw has been modified to not be over their house, happy with this decision; to the west of quarter line (private vs municipal land)
R3-LF051S	old homestead site	Not any closer, concerned about environmental degradation, property values, health interest, hotbed for bird species: have birders approach him to go on property and look for birds, habitat for golden winged warbler and woodpeckers
R3-LF052S		N concerns; asked about access
R3-LF001H		underground possibility; EMF concerns; development potential; how long will construction take per tower; concern regarding Nise from the line and from construction
R3-LF002H		concern regarding EMF; would like to see the line buried to get rid of EMF; concern regarding access to Wpg if the lines break and block the road; feels the province has a conflict of interest in regulating the project

AECOM Reference Number	Grave details	Additional comments
R3-LF003H		N major concerns
R3-LF005H		owns property adjacent RL39/40 east of TOW, are concerned with clearing full width of ROW as they have paths along their property line and it would create more open space.
R3-LF006H		unhappy about the south loop, didn't kNw about it previously.
R3-LF002OB		health concerns (dealt with); aesthetics and property values; if viewshed changes, there is an issue
R3-LF001R		Interested in purchasing Cottonwood Golf Course. Has considered subdividing lots along highway and prefers the route to remain where it is in proximity to the golf course. Provided detailed information on development plans on rural residential zoning within golf course. Map shows a currently zoned residential area and an area that has potential residential/camping development on Cottonwood Golf Course
R3-LF002R		If land is needed, wants total buy-out. Will join Caepela if have to. will Nt like it if a line comes in. Indicates strong opposition. Worried about ATV access. Will oppose to the end.
R3-LF003R		William Simpson & Jacqueline Simpson-Riws (or Rioux). NE-21-9-7 E. Already spoke with at previous event. Approximately 240 m of line accross land. Would Hydro work with CAEPLA representative for property? Line crosses property in mid-point between hill and pit at SW corner. The well is approx. 245 ft deep. Wants to kNw if the herbicide could potentially affect well water quality. If landowner doesn't want herbicide , they don't have to use it on land. Home, well and property identified on map.
R3-LF001OB		when originally designing ROW, planners should have thought of larger equipment possibilities.
R3-LF003OB		appreciates opportunity to talk about it, ask questions
R3-LF004OB		
R3-LF004R		N additional comments
R3-LF005OB		EMF, information provided; Nise
R3-LF006OB		concern about bility to farm around towers, change to farm practice, unsure if impact right Nw until sees tower configuration
R3-LF005R		-if damage from equipment during construction/maintenance after line is built, who is responsible for costs? If herbicides are Nt used on their property but are on property adjacent, what happens with effects on property? (completed from questions previously)
R3-LF007R		concerned about aerial spraying; GPS concern about hitting towers; concerned about potential Nise effects on dairy animals at distance of approx 600m; helicopter fly overs and Nise effects on livestock; would prefer the route Nt to be there.

AECOM Reference Number	Grave details	Additional comments
R3-LF006R		Landowner would be affected on west and south side of home with PR. View is west and south. Route adjustments and home shown on map. Route adjustments described in follow up section.
R3-LF008R		wasn't interested in filling out landowner form, just wanted to kNw about compensation (went through compensation package); has shop on proper, gravel pits on the other side of the section.
R3-LF009R		N concerns
R3-LF001D		concern regarding Ntification, didn't hear about until Rnd3, should hav received a letter from the beginning; feels they are already giving to society by having one line (230 kv) line on their property, unfair to have a second line; discussion on compensation; once the line does in, feels the east side of the property is wasted space.
R3-LF002D		Potential mitigation described in follow up section.
R3-LF004D		placement of towers important for famring (wants to see side-by-side placement for multiple lines); has land Nrth of existing ROW; farms under current 500kv line; has 7-8 subdivisions on his SE quarter-section currently occupied, Nt owned by Mr. Johnson.
R3-LF005D		Nt in favour of current line routing across property, on either side of existing 230 ROW; property value considerations; ATV access is a concern; future subdivision potential; EMF concerns, living in proximity to T-line.
R3-LF006D		property value effects; EMF concerns; Nise - don't want to hear them is their biggest concern; ATV access into new wildlife and hunting areas; visual impact
R3-LF001A		
R3-LF002A		see attached map and letter from landowner
R3-LF001ST		calving ridge concerns; 800 animals/year; calving in March/April; black out zone for work; wean in May; calving barn (on map) which is fenced off; prefer self-supporting tower, extra hazard; 42 bulls on one side; 130 cow calf; hay a portion
R3-LF004A		Owns southern 80 acres of 1/4 section. NW-20-7-8. Concern as owner plans to subdivide and properties will Nt be worth as much if they are near the transmission line. People are terrified of living close to a large transmission line. Landowner owns southern 80 acres of the 1/4 section. although Nt a huge direct impact, will decrease property value. Property identified on map.

AECOM Reference Number	Grave details	Additional comments
R3-LF003A		Letter received from landowner.
R3-LF001T		concern regarding access mgt, wants to work with MH to ensure a good access management plan is in place.

AECOM Ref Number	Open House	Date	Map Details
R3-LF001Z	Zhoda	10-Feb-2015	Property identified
R3-LF004Z	Zhoda	10-Feb-2015	Identified house and cattle pond on map
R3-LF005Z	Zhoda	10-Feb-2015	Identified property boundaries (2 maps)
R3-LF006Z	Zhoda	10-Feb-2015	Plan D - review with potential 2 degree modification at sw corner of WPD WMA. Second map with ponds identified and route modification
R3-LF001P	Piney	11-Feb-2015	n-s fiber optic line identified on map and 2 modifications
R3-LF002P	Piney	11-Feb-2015	Modification and ridge identified
R3-LF003P	Piney	11-Feb-2015	Property and Grove of Cedars identified
R3-LF002W	Winnipeg	12-Feb-2015	Identified property on map
R3-LF005W	Winnipeg	12-Feb-2015	Proposed route adjustment, home and property identified
R3-LF006W	Winnipeg	12-Feb-2015	Modification to increase distance from property
R3-LF007W	Winnipeg	12-Feb-2015	Identified hog barns and would like to see towers placed beside D602F in ROW
R3-LF009W	Winnipeg	12-Feb-2015	Indicating general public access point and tower spotting locations
R3-LF011W	Winnipeg	12-Feb-2015	Map from RM of Springfield. Drain Plan and Trans Line Plan
R3-LF012W	Winnipeg	12-Feb-2015	Uncertain if land owned by MH or easement. Follow up required
R3-LF014W	Winnipeg	12-Feb-2015	Proposed route adjustment/modification
R3-LF002L	La Broquerie	17-Feb-2015	Home identified on map
R3-LF005L	La Broquerie	17-Feb-2015	Lots and parcels identified on map.
R3-LF014L	La Broquerie	17-Feb-2015	Additional residence on the property, private 5 acre lot
R3-LF019L	La Broquerie	17-Feb-2015	Home and natural shelterbelt for wildlife corridor to the river identified on map
R3-LF022L	La Broquerie	17-Feb-2015	House identified on map
R3-LF023L	La Broquerie	17-Feb-2015	Cabin, property and future home identified on map
R3-LF025L	La Broquerie	18-Feb-2015	Property identified
R3-LF026L	La Broquerie	18-Feb-2015	Wells and yardsites identified
R3-LF028L	La Broquerie	18-Feb-2015	Wetlands and parcel of property identified
R3-LF029L	La Broquerie	18-Feb-2015	Property identified
R3-LF030L	La Broquerie	18-Feb-2015	Property identified
R3-LF031L	La Broquerie	18-Feb-2015	home and recreational use area identified on map
R3-LF032L	La Broquerie	18-Feb-2015	home and animal sighting/habitats shown on map
R3-LF033L	La Broquerie	18-Feb-2015	home and subdivide pieces shown on map
R3-LF034L	La Broquerie	18-Feb-2015	subdivision plans and future home location shown on map
R3-LF035L	La Broquerie	18-Feb-2015	home and school identified on map
R3-LF040L	La Broquerie	18-Feb-2015	map shows properties, sloughs and possible centennial farmhouse

AECOM Ref Number	Open House	Date	Map Details
R3-LF042L	La Broquerie	18-Feb-2015	map shows home and future home/shop area on ALO 062
R3-LF045L	La Broquerie	18-Feb-2015	map shows warmup shack and clubhouse, flood storage and control structure; walking trails and adjacent crownland leased by the 7 oaks fish and game assn.
R3-LF046L	La Broquerie	19-Feb-2015	Homes, wells, preferred tower placement for manure drag line, barns identified on map
R3-LF047L	La Broquerie	19-Feb-2015	Property identified
R3-LF056L	La Broquerie	21-Feb-2015	route modification indicated on map
R3-LF057L	La Broquerie	21-Feb-2015	2 homes and route modification indicated on map (2 maps)
R3-LF060L	La Broquerie	21-Feb-2015	routing modification suggestion indicated on map
R3-LF061L	La Broquerie	21-Feb-2015	hay areas and shelterbelt around river shown on map
R3-LF062L	La Broquerie	21-Feb-2015	cultivated rental land, home, new barn shown on map
R3-LF063L	La Broquerie	21-Feb-2015	routing alternative and tower placement suggestions shown on map
R3-LF001S	Ste. Anne	24-Feb-2015	Measurements from residence to centre line and acreage calculation.
R3-LF006S	Ste Anne	24-Feb-2015	Home
R3-LF011S	Ste Anne	24-Feb-2015	Home
R3-LF012S	Ste Anne	24-Feb-2015	Home
R3-LF013S	Ste Anne	24-Feb-2015	Trout ponds, home and recreation, fruit trees, newly planted 2000 pine trees.
R3-LF017S	Ste Anne	24-Feb-2015	No comments
R3-LF019S	Ste Anne	24-Feb-2015	Future retirement home, vacant land for sale, new home (6 mth old), existing rental property, modification proposed.
R3-LF020S	Ste Anne	24-Feb-2015	gravel pit, lagoon site, RM testing stations
R3-LF037S	Ste Anne	26-Feb-2015	40 acres ownde, 20 acres split (proposed subdivision)
R3-LF023S	Ste. Anne	25-Feb-2015	Home
R3-LF026S	Ste. Anne	25-Feb-2015	Home, marsh area
R3-LF028S	Ste. Anne	25-Feb-2015	half of quarter section highlighted.
R3-LF040S	Ste Anne	26-Feb-2015	cropping
R3-LF042S	Ste Anne	28-Feb-2015	metal machine shed, house - previously moved, mobile home, new workshop, only area of creek with water because of beavers.
R3-LF049S	Ste. Anne	28-Feb-2015	No comments, area marked.
R3-LF002H	Headingley	4-Mar-2015	home
R3-LF003H	Headingley	4-Mar-2015	home, don't own yard site
R3-LF006H	Headingley	4-Mar-2015	transcanada trail
R3-LF001R	Richer	11-Mar-2015	shaded is currently zoned residential, highlighted area has potential residential/camping development

Appendix E4 - Landowner Form Results

AECOM Ref Number	Open House	Date	Map Details
R3-LF003R	Richer	11-Mar-2015	home, well
R3-LF003OB	Oak Bluff	5-Mar-2015	subdived
R3-LF004OB	Oak Bluff	5-Mar-2015	Move MMTP to north side of existing lines to avoid home.
R3-LF006R	Richer	11-Mar-2015	route adjustments (3)
R3-LF001D	Dugald	12-Mar-2015	driveway and home, future home for son
R3-LF001A	landowner home	30-Jan-2015	Owned, modification, slough, wetlands
R3-LF002A	Winnipeg	12-Feb-2015	Modification A, B, C provided on Map Viewer
R3-LF001ST	Hylife office	6-Feb-2015	calving ridge concerns, calving barn, fenced off, spreading allocation, manure storage
R3-LF004A	Phone Call	31-Mar-2015	No comments
R3-LF001T	Steinbach	9-Apr-2015	Route modification move line off potential subdivision.

Appendix E

**E1 – Stakeholder Group and
Landowner Meeting Minutes**

E2 – Comment Sheet Data

**E3 – Online Comment Sheet
Data**

E4 – Landowner Form Data

E5 – Mapping Data

**E6 – Email and Telephone
Summary**

iPad Mapping Data			
AECOM Identifier	ConcernDescription	PreferenceDescription	SiteDescription
R3-I001	Aesthetics, property values, concerns about noise from the lines, potential health concerns.		
R3-I002	Land going through permitting to build a home in this tree stand. Would be unable to build if this route 207 comes back on		
R3-I003	Uses land to hunt. Metis harvester rights holders. Three adjacent land owners are also using the land.		
R3-I004			Would not oppose having the angle structure located on their property
R3-I005			Currently building a home.
R3-I006		Would prefer to see the transmission line follow the existing transmission line. This would render the line to be in close proximity to the homes that re currently sandwiched between the two lines.	
R3-I007		Route modification suggested by landowner. This will limit the impact from an agricultural and a visual concern.	NW 17 10 7
R3-I008	Home planned to be built but sale of property is pending a decision on the final route. Preference for segment 208		
R3-I009	Concerned about health effects from the line. 3/4 family members have cancer. Living in house since 28 years. Thinks it's too close.		
R3-I010		Alignment would be preferred to allow for useable land and increase distance from home and would cross more bog than pasture.	
R3-I011			Would like to eventually spread their ashes in this area.
R3-I012			Current mining of gravel

iPad Mapping Data			
AECOM Identifier	ConcernDescription	PreferenceDescription	SiteDescription
R3-I013		Tower placement would minimize visual impact. Jives with northern tower placement.	
R3-I014		Tower placement to minimize visual impact. Jives with a tower placement just on the south side of Tetrault drive (35N)	
R3-I015			Future mining plans for the rm of tache for gravel
R3-I016			Future location of a home after subdivision.
R3-I017	No concerns as the project does affect their property		
R3-I018			Black bear have been known to den I this area during the winter
R3-I019			Lady slippers have been seen in the property line south of the home. Annual sightings
R3-I020	Moved to the area 5 years ago, from wpg to become farmers. Used to have a cottage at pointe du Bois and do not want to see another transmission line.		
R3-I021		Would prefer this alignment based on potential impact to operation. Would like to see this line follow the creek and have a tower in the swampy area.	
R3-I022			Future plans of MIT to redevelop the Courchaine Bridge
R3-I023		Alignment would allow landowner to dig a drain to one t to developing drains along highway 89	
R3-I024	concerns with how close the line is to the property. Was happy with the relationship the Colony has with Hydro (allowing them to farm the land). Comes close to some buildings.		

iPad Mapping Data			
AECOM Identifier	ConcernDescription	PreferenceDescription	SiteDescription
R3-1025	It was raised by local members and the RM of Stuartburn that there is an annual rodeo which the community members attend and it is generally held the last weekend on August. They would like is to consider this in our assessment and possible mitigation measures during construction.		
R3-1026			Intends to develop a dug out in the summer of 2015.
R3-1027			See black bear over past spring
R3-1028			Has noticed Sandhills cranes nesting in the area. Tends to be doing so annually.
R3-1029	Lots of bogs and springs in the area. Member of public wanted us to know. No major concerns.		

Appendix E

**E1 – Stakeholder Group and
Landowner Meeting Minutes**

E2 – Comment Sheet Data

**E3 – Online Comment Sheet
Data**

E4 – Landowner Form Data

E5 – Mapping Data

**E6 – Email and Telephone
Summary**

Manitoba Minnesota Transmission Line- Round 3- Summary of Email Logs

AECOM Index #	Email Information		ALO / MLO #
	Date and Time	Email Summary	
R3-E001	Tue 1/13/2015 11:56 AM	Looking for updated information on the project. Understands that the Zhoda Hall has been booked for an OH. MH indicated that the preferred route will be released in the near future and notification will be done through letters, posters, postcards, etc...	ALO 138
R3-E002	Mon 1/12/2015 8:08 AM	Questions: how does the env. impact statement get started without a line being announced yet? There is an ad in the free press (Jan 10/15) and carillon news (Jan 8/15) asking for public and landowner input; how do we input when we don't even know where the line is going? MH indicated that the Env. Assessment Scoping doc. was filed with MBCWS is the outline of how we will be developing the EIS. There will be public and regulatory review of the EIS once submitted to MB Cons that outlines the potential impacts and mitigation measures of the preferred route.	ALO 041
R3-E003	Tue 1/6/2015 2:37 PM	Question regarding when MH announces the line, is it put in the paper? Do you send emails to landowners or is there another way? MH indicated that affected landowners will receive a registered letter via Canada Post, MH will announce route in Wpg. Free Press, Sun and other local papers, in the Ecampaign that will send an email to those subscribed and if you have attended a previous OH and indicated your preferred method of contact. Provided link to website, phone number and email address.	ALO 041
R3-E004	Fri 1/2/2015 9:33 AM	Website says line picked by dec. announce early 2015. Is it too early to ask. MH indicated will be releasing the preferred route within a month.	ALO 041
R3-E005	Thu 12/18/2014 1:22 PM	Continuation of previous email. Requested a map. Indicated that their land is just south of the curve in highway 5 south of Glenboro. Do you by chance have a Google map that shows proposed with existing towers for the area extending from Glenboro to the wetlands area south.... About six miles? MH provided a map of this area.	
R3-E006	Thu 12/18/2014 1:12 PM	Provided resume. MH recommended signing up on the MH website under "Careers" and provided the link.	
R3-E007	Fri 1/16/2015 3:44 PM	Email blast for R3. Letter B sent to stakeholders & MH will contact them directly to set up a meeting.	
R3-E008	Fri 1/16/2015 3:43 PM	Email blast for R3. Letter A sent to stakeholders for info only and if they would like to meet with MH to contact MH directly.	
R3-E009	Fri 1/16/2015 3:41 PM	Email blast for R3. Letter C sent to Glenboro stakeholders.	
R3-E010	Fri 1/16/2015 3:41 PM	Email blast for R3. Letter D sent to a group of stakeholders & MH will contact them directly to set up a meeting.	
R3-E011	Fri 1/16/2015 3:41 PM	Email blast for R3. Letter A sent to stakeholders for info only and if they would like to meet with MH to contact MH directly.	
R3-E012	Fri 1/16/2015 11:54 AM	When MH announces the line, will an email be sent out instantly to affected landowners? OR do we wait until it goes public? MH indicated that the website will be updated and an email blast will be sent out. Registered letters will follow.	ALO 041
R3-E013	Wed 1/14/2015 7:44 AM	Emailing requesting "send info." MH requested to please contact him directly at 1-877-343-1631 for him to pull together the info they are looking for or to please provide the type of info they would like by email.	
R3-E014	Fri 1/16/2015 4:39 PM	As per phone conversation, MH attached a map of the preferred route in relation to landowners property.	ALO 136
R3-E015	Tue 1/20/2015 7:45 AM	Initial email is the Preferred Route Determined e-blast. Provided new contact for Travel Manitoba (stakeholder) as M.Clarke is retiring.	
R3-E016	Tue 1/20/2015 10:08 AM	Received a letter that contained information stating that the addressee owns land within 1 mile of the proposed right-of-way. To my knowledge the Groundwater section of Manitoba Conservation and Water Stewardship is not a land holder. However there is no land description or other information included in this letter to make a determination as to whether some other group in MC&WS does hold land in the area and to which the letter should be forwarded. MH indicated that they utilized GIS data points for MB Hydro meters within one mile of the preferred route and provided additional information details.	MLO 1669
R3-E017	Tue 1/20/2015 9:54 AM	MH provided KMZ files as discussed.	
R3-E018	Tue 1/20/2015 11:47 AM	Landowner indicates that preferred route runs along the north boundary of their home property. Will be situated in the middle of 3 line transmission corridor. Will Hydro be doing anything about this now that the preferred route has been selected? My specific concerns are as follows. Want to know how residing in the middle of a three line transmission corridor is going to affect my health. Not a glossed over version, I would like to see an actual medical study of others similarly exposed and how it affected their health over the long term. I expect that the value of my property will be negatively affected due to being located in the middle of a three line transmission corridor. I can ask about a Market Value appraisal with and without the third transmission line and will want to know if Manitoba Hydro plans to provide compensation for this loss in value. Removal of all trees to the North of my property to make way for the transmission line will expose my property to an open field with no protection from the wind. There is some room on Hydro lands adjacent to my fence line where new trees could be planted to provide protection from the wind and a bit of a visual barrier between my property and the transmission lines. I would like to be involved in a planting design and the selection of a number of trees (of appreciable size, not seedlings) for this area. My expectation is that the trees would be purchased and installed by MB Hydro and that Hydro would also water the trees in year one while they are becoming established. MH provided info on EMF along with links to the website for other brochures. Indicated as part of the environmental assessment. Manitoba Hydro will enter into easement agreements with all traversed private land holders and will pay 150% of market value for the acreage necessary for the easement. Agricultural lands will receive a tower placement payment for the land taken out of production that is based on the crops harvested on the land. Regarding property values and adjacent land owners, Manitoba Hydro has monitored property values with other projects and has noted no appreciable change in property value. Compensation payments will only be paid for those who house the transmission line infrastructure.	MLO 145
R3-E019	Tue 1/20/2015 11:44 AM	Initial email is the Preferred Route Determined e-blast. Landowner asks if "it must be settled now...well probably was, all along."MH provided that Hydro has been undertaking a route selection process as well as gathering feedback through public engagement to determine a preferred route for the Project. This preferred route aims to balance human, natural and engineering perspectives on the landscape. Round 3 will focus on gathering feedback to consider any final adjustments to the route prior to filing the project's environmental impact statement for regulatory approval.	
R3-E020	Tue 1/20/2015 11:36 AM	Initial email is the Preferred Route Determined e-blast. Concerned about rate increases and not agree with the proposed MMTP. Will be affecting their quality of life. MH indicated that MB Hydro maintains some of the lowest electricity rates in North America and exports surplus power to neighboring provinces and states as part of revenue generation. The Public Utilities Board regulates rates charged by Manitoba Hydro to its customers. Also provided additional details regarding exporting. Individual responds concerned that they will not be able to pay their increased Hydro bill. MH provides links to power smart information and equal payment plan programs and indicates MH takes energy affordability very seriously.	
R3-E021	Tue 1/20/2015 11:30 AM	Landowner indicates "Did my route get picked cause I didn't sign up with that snake oil salesman ?? Or is it cause I didn't get my face all over the news like others?? Or ??what are the time lines now?? If my gravel worth more then building lots is the pay out at time of signing for property or does it happen in 2020 when line is up??" MH indicated numerous criteria and considerations go into determining a preferred route, and we seek to balance concerns from human, natural and technical perspectives. The route at this time is considered 'preferred' but is not final. We will be meeting with affected landowners to understand their concerns to develop measures to mitigate potential impacts of the project. MB Hydro aims to submit the EIS this summer. This will begin the regulatory review period. At the end of the regulatory review period the route is considered final, and then we will begin negotiating with landowners on related compensation if a license is received for the Project which is anticipated for 2017/2018. Easement payments would be paid to the landowner after they have signed the agreement.	ALO 041
R3-E022	Tue 1/20/2015 11:10 AM	MT provided some information about MMTP and included link to website, project newsletter and interactive webviewer.	
R3-E023	Tue 1/20/2015 10:43 AM	MH as per phone conversation provided a link for the map request.	MLO 1186
R3-E024	Tue 1/20/2015 12:34 PM	Would like to know if the existing hydro towers running through Headingley will be removed after the new ones are built or if they will remain in place. MH indicated the existing towers will remain in place and will follow the existing corridor.	
R3-E025	Tue 1/20/2015 1:38 PM	Did my route get picked cause I didn't sign up with that snake oil salesman ?? Or is it cause I didn't get my face all over the news like others?? Or ??what are the time lines now?? If my gravel worth more then building lots is the pay out at time of signing for property or does it happen in 2020 when line is up?? MH indicated there are numerous criteria and considerations that go into determining a preferred route and MH will sit down with landowners to understand their concerns to develop mitigation measures. Individual requested to meet with MH and MW to understand what to do with his properties. MH indicated MH, MW and MT will be available to meet as the landowners convenience.	ALO 041
R3-E026	Tue 1/20/2015 2:05 PM	Thought the Riel Station was originally designed and constructed to for power lines from Dorsey to run a northern route around Winnipeg and come into the Riel complex from the north. This distance is also shorter than the proposed route circling to the south. Changing technical design after the fact and incurring a longer route to the south is going to leave Manitobans on the hook for extra costs related to design adjustment, implementation, and maintenance for years to come. The project should be built as it was originally engineered to be. MH explained that The Riel Station provides a second converter station in southern Manitoba to ensure the continual supply of power to Manitoba Hydro customers. The transmission line for the Manitoba-Minnesota Transmission Project will not be connected to Riel Station but will utilize the southern corridor that is separated from the existing 500kV export line that terminates at Dorsey Station. Having separation between the two converter stations and having terminus points at the two locations will provide a higher degree of redundancy to the Manitoba Hydro system if a catastrophic failure were to occur with one of our facilities.	
R3-E027	Tue 1/20/2015 2:34 PM	MH informing individual that his package is ready for pick up at 820 Taylor Avenue.	
R3-E028	Tue 1/20/2015 4:16 PM	MH provided individual with information regarding the public engagement process that is being undertaken for the Manitoba-Minnesota Transmission Project. Explained stakeholder notification and meetings, workshops and open houses. Sent Round 1 and Round 2 information.	
R3-E029	Wed 1/21/2015 8:41 AM	MH sent links to the project website, document library and interactive map viewer. The newsletter was attached.	
R3-E030	Wed 1/21/2015 12:13 PM	Individual thanked MH for sending the information on the MMTP. They indicated that her husband and her have no concerns about the project and they will not be attending the upcoming meetings. MH replied thanking them for the email.	MLO 1393
R3-E031	Thu 1/22/2015 4:32 PM	MH as per phone conversation provided links to project information: postcard invite to previous open houses in Glenboro, Storyboards from the open house, Map of Endbridge property adjacent to the MH Glenboro Property and link to the project website. The Enbridge property SE ¼ 3-7-14 WPM which lies to the eastern limit of public road plan 979 MLTO is adjacent to the properties being affected but is not directly affected by the project.	
R3-E032	Thu 1/22/2015 11:20 AM	Question: How is the price of our land gonna be decided ? Individual indicated that it will be hard to compare it to the other properties in the area as they are located on the highest land on 501 and everything else downhill is wet or swampy and bushland down the road sold 5 acres for 55,000\$. They highly doubt MH will pay prices like that we calculated on the route it should be going thought at least 12 acres of our bush land so I hope there paying for the land plus damage to the trees and what not. Individual is unable to attend the meetings as they will be out of town. Asks when they will receive compensation. The individual is planning to subdivide and build a new house on the land the line is running through In the next few years but individual states that it would be a waste of time planning. MH responded explaining appraisers use various methods and tools to calculate market value and MH will discuss any specific questions landowners have at the time of the negotiation. MH explained that ancillary damages such as loss of fire wood due to bush clearing will be negotiated prior to signing of the easement agreement and will be paid after the easement agreement is registered at the Land Titles Office. Damages resulting from construction activities and structure impact (farm lands only) will be paid after construction. Landowners will receive a deposit payment (re: land payment and ancillary damages) of \$225 at the time of signing the easement agreement with the balance to be paid after the easement agreement is registered at the Land Titles Office. MH indicated regulatory dates and inservice date.	ALO 101
R3-E033	Wed 1/21/2015 4:50 PM	Question: are you going to be using the existing towers that currently are there or will you be adding another row of towers.? If so how far north of the existing tower will you be going? Currently the line is just over a half mile away from my property. I want to know exactly how close you will be with the structure, guide lines or what ever else you are planning on installing. Lives in Anola. MH responded indicating the towers will be on the north side of the existing T-line. Asked for individuals legal land location and will provide a map indicating its location in relation to the individual's home, including Bipole III and the existing T-Line.	MLO 069

AECOM Index #	Email Information		ALO / MLO #
	Date and Time	Email Summary	
R3-E034	Thu 1/22/2015 3:50 PM	Request from RM of Tache for MH to attend a future council meeting in February to discuss the proposal. Of particular interest: Section 28-9-7E. MH responded they will be in attendance on Feb. 10. Individual stated council's main question is what is MH's approach (compensation) to property owners when transmission lines cross into and/or over valuable aggregate resources such as in our case? There will be 8 Members of Council and 2 administrative figures. MH confirmed attendance will be with MT and himself.	ALO 117
R3-E035	Thu 1/22/2015 3:12 PM	Individual states that MH consultations are "smoke and screen", the route was predetermined, social impact is greater than MH could anticipate, The cost benefit approach is temporal in nature, for the additional cost (legal, political, compensation, etc) forthcoming from a concerned public will outweigh your current analysis, The next upcoming provincial election may add an additional damper to the present route, The decided route is too close to the town, given that the Seine River, golf course, proposed municipal parks will destroy the landscape and impact on the future recreational potential. Requests all current and past documentation on the public feedback and eco-environmental analysis. MH responds by explaining the EA and public engagement process. MH provides link to the project website and document library and EA material. Provides link to open house dates.	ALO 023
R3-E036	Mon 1/26/2015 9:47 AM	Initial message was not shown in email chain. MH replied by thanking in the individual for their interest in MMTP and provided the link to the careers section on the MH website.	
R3-E037	Mon 1/26/2015 8:38 AM	Questioning why MH does not buy local food and drinks for open houses ie Bothwell cheese, Mom's Bakery, Canadian Gold Water. MH replied that local caterers are used where possible.	
R3-E038	Mon 1/26/2015 8:28 AM	Advising MH that they sold their property and don't know who purchased it. MH responded thanking for the email and will look into who purchased the property.	ALO 031
R3-E039	Mon 1/26/2015 8:26 AM	Advising MH that the route alignment on website on Jan 2015 is ok for their family with satisfactory distance. MH thanked individual.	
R3-E040	Mon 1/26/2015 8:25 AM	Thanked MH for the online maps and determined the line will be 3 miles west of our home and is satisfied. MH replied thanking them for their email.	
R3-E041	Mon 1/26/2015 8:27 AM	Stated the current proposed route of Jan 2015 is suitable for their family, with fair distance from their multi-generational home. MH responded and thanked the individual.	
R3-E042	Mon 1/26/2015 10:44 AM	landowner did not give permission to place cancer causing power lines right under their property. Health concerns-brain tumors, leukemia, birth defects, lymphoma, EMF such as headaches, fatigue, anxiety, insomnia, etc. MH indicated that part of teh EA being undertaken, EMF will be discussed. Attached links to information provided on website including EMF report.	ALO 023
R3-E043	Mon 1/26/2015 10:10 AM	Reference letter dated Jan 16, 2015. Will not be able to attend OH's in Feb and Mar but would like to receive a copy of any updates. Does not want any done to his property that would jeopardize the current and future potential value of the property. Difficult to express his view until receive an acceptable compensation offered to his property and the other affected landowners. MH would like to set up a phone call if desired to discuss the project and gather info about the property. Provided phone number for MH and provided links to the project on the website.	ALO 054
R3-E044	Mon 1/26/2015 3:42 PM	Landowner would like to know if Hydro has any objections or concerns with their proposed subdivision because of MMTP. MH indicated that at this time they do not anticipate large modifications to the preferred route however during regulatory review there is a possibility that the route could be modified. The route is not final until a licence is received to construct the project and it's not anticipated until 2017. Attached a map showing their property in relation to the preferred route.	
R3-E045	Mon 1/26/2015 3:09 PM	Continuation from email R3-E020: Concerns about Hydro increasing the rates for electrical heating. There are people in rural MB tha have no other option for heating besides electricity. Hydro should not be increasing the rate of heating. MH understand your concerns and have presented suggestions that are available to help address them, including our Power Smart initiatives which have recently been dramatically increased. We also understand that you feel these do not adequately meet your needs and have communicated this to our Power Smart program people.	
R3-E046	Mon 1/26/2015 3:07 PM	Received MLO letters for 9 sites. Who are they intended recipients so that we can redirect them accordingly. MH indicated that These packages were sent to electrical meter holders within one mile of the preferred route to inform them of Manitoba Hydro activities regarding the Project. Please contact me at 204-360-4305 and I can provide you with some information regarding the details of the database.	MLO 1670, 1671, 1673, 1674, 1676, 1678, 1679, 1680
R3-E047	Mon 1/26/2015 2:51 PM	As discussed last week, there is a large overview map and localized map for the Tache area at the security desk of 820 Taylor.	
R3-E048	Tue 1/27/2015 9:11 AM	Received notice that the proposed route will be within 1 mile of land we own. Please provide more specific info as to the location being referred. MH provided map. Landowner indicated that it was a temporary service for work at the Brady Landfill; this service has been removed. MH thanked landowner.	MLO 1766
R3-E049	Tue 1/27/2015 8:37 AM	Continuation from email R3-E046. MH spoke with landowner about the letters. Discussed how meter locations were pulled and she will forward the letters onto the appropriate individuals. 01/27/2015 @ 8:36 am	MLO 1670, 1671, 1673, 1674, 1676, 1678, 1679, 1680
R3-E050	Tue 1/27/2015 8:21 AM	Continuation from email R3-E042. She does not want the line over her land, plain and simple. Look into a new route.	ALO 023
R3-E051	Mon 1/26/2015 4:04 PM	Received a kick back from the letter we sent out for your last week. I have modified the mailing address so it should arrive to you shortly. My apologies for not catching this.	ALO 136
R3-E052	Tue 1/27/2015 11:23 AM	Forwarded initial email from MH regarding stakeholder meetings.	
R3-E053	Tue 1/27/2015 9:16 AM	I understand you were wanting some information regarding potential engineering consultant contracts related to the Manitoba-Minnesota Transmission Project. At this time Manitoba Hydro intends to complete our design using internal labour resources.	
R3-E054	Tue 1/27/2015 9:16 AM	SJ suggested I contact you. I received a phone call from a gentlemen who is interested in finding out if Manitoba Hydro will be hiring any contractors for engineering for MMTP. Would you be able to provide him with the info he needs. AM indicatd that she will respond to him via email.	
R3-E055	Tue 1/27/2015 1:37 PM	Initial email blast sent. MAAA indicatd they met with Stantec on the morning of Jan 26, 2015. A report of the meeting will be forwarded to Hydro and to MAAA and will be in touch later this week.	
R3-E056	Tue 1/27/2015 1:13 PM	Scheduled a meeting with RM of Ritchot and Hydro on Feb 3, 2015 @ 10:30 am.	
R3-E057	Tue 1/27/2015 3:25 PM	Forwarded initial email from MH regarding stakeholder meetings. Indicated that I will follow up with her next week to set up a meeting if interested.	
R3-E058	Tue 1/27/2015 2:58 PM	Phone call Jan 26, 2015 @ 1630. Attached map suggests two modifications put forward to landowner. Blue Dot - Location of Residence Yellow Line - Preference for the line to remain on the western side of R49R Orange Line - Stay on the western side of R49R until past her property. Cross over R49R prior to her neighbor (to the south) to the west to maximize separation between both residences.	ALO 074
R3-E059	Wed 1/28/2015 8:57 AM	Would like to meet to address concerns and discuss compensation. Also own *company and QS specified*. Small amount of stone and gravel in 3 mile from line. Would also like to see more local products at meetings. MH asked if there is a specific time you would like to meet with one of our representatives at one of the OHs. Please let me know what date and time would work best and will schedule to meet.	ALO 083
R3-E060	Wed 1/28/2015 8:53 AM	Initial email: Voici mes inquiétudes... D'abord vous démontrez les 3 routes 75, 59 et 12. Sur la route 59, on y trouve Ile-des-Chênes, St-Malo et Toilstoi. Comment êtes-vous arrivés à choisir ces villages? Pourquoi St-Pierre-Jolys ne s'y trouvent pas? D'abord la route 59, passe directement dans le village de St-Pierre-Jolys, ce village bien actif est incorporé et MB Hydro y a des installations (sub station) à l'est dans le village. Est-ce un manque de votre part ? je souhaiterais que ceci soit corrigé à la prochaine publicité de votre part. J'invite le CDEM, l'ANIM, la SFM et le village d'appuyer cette demande. MH responded: Par rapport à la publicité, nous choisissons des localités qui se trouvent à proximité du tracé préféré pour le projet. Puisqu'il y a de nombreuses localités dans le sud-est du Manitoba, nous essayons de choisir celles où ont lieu nos discussions avec le public. Indicated to log as Public Engagement.	
R3-E061	Fri 1/30/2015 11:04 AM	Received a package in the mail as MLO. Their property is roughly 0.25 miles from the nearest transmission line (Biopole III). Based on estimates, the three lines combined will run at a width of 200 m? Will the lines be placed as close as possible to each other? EMF questions based on three lines being greater (biopole III, D602F and MMTP)? Property values? MH provided a map of the property where these lines are and provided an estimate of 425 m distance from the residence on this quarter section. Provided links to the website including documents. Hydro is review property values as part of the EA. Landowner thanked MH for the information and will get back to him if they have additional questions.	MLO 307
R3-E062	Fri 1/30/2015 9:34 AM	Provided links to the Hydro website for information regarding the project as per phone call this morning.	
R3-E063	Fri 1/30/2015 8:53 AM	Landowner thanking MH for taking the time to listen to their concerns. explanations and thoughts were helpful to our understanding of the project, the process, and its implications. They are very happy that the line follow north of them and will not impact their properties. MH thanked them for participating in the public engagement process.	
R3-E064	Thu 1/29/2015 3:18 PM	Requesting a map showing the route changed regarding the cemetery north of sundown and a zoomed in map showing the line running through the RM. MH is in the process of putting the package together. He will be providing info to council regarding the Ridgeland Cemetery. RM asking if Hydro is meeting with the Sundown Group on Feb 2nd? MH indicated they have not been approached by the group. RM indicated that they thought they heard "rumblings" of a meeting; just checking to see if it was accurate.	
R3-E065	Thu 1/29/2015 11:07 AM	Forwarding a map request forwarded to MH from KC. Will be sent via two emails (1 of 2).	
R3-E066	Thu 1/29/2015 11:08 AM	Map 2 of 2	
R3-E067	Fri 1/30/2015 12:03 PM	Continuation of R3-E043: Landowner provided 8 questions to gain a general understanding of the following: area on my property affected; how to assess market value, am I still the owner/how would the title be affected; how is compensation calculated; what would compensation be on the removal of trees on my property; future zoning. MH provided a map showing the proposed centre line of the transmission lines on landowner property. Also provided some additional information to the above questions including a landowner form that they will go through with affected landowners. This would be the focus of the phone call.	ALO 054
R3-E068	Fri 1/30/2015 12:33 PM	MH thanking for the email regarding MMTP. Mr. P brought your concerns (email dated Jan 26, 2015) to the EA team. MH has documented your concern regarding the proximity of the transmission line to the WMA. We work with various groups during the environmental assessment and I want to assure you that protected and proposed ecological reserves, and WMAs, are considered in our route determination and environmental assessment processes. The preferred route minimized many perceived impacts from interested parties. Continuation of R3-E060. Council discussed the transmission line and have several questions. What is Hydro proposing to affected property owners, are the intentions to purchase land or enter into easement agreements? As per the resolution that we had forwarded to you in May 2014 (resolution 172-14) whereas council requested that route #207 as the logical alternative for this project, what were or are the challenges that you encountered or reasons for not taking this route option? Which towers are you intending to use throughout our municipality, self-supporting lattice or guyed suspension steel and what is the height/width of these towers? MH responded: • Manitoba Hydro will enter into easement agreements with landowners. Landowners will retain ownership rights and the easement grants Manitoba Hydro the right to construct and maintain the transmission line. • The resolution brought forward by council was considered by the project team during the route determination process. The routing process takes into consideration an entire route and not single segments when comparing and evaluating positives and negatives. The route selection process aims to balance the human, natural and technical environments for the entire route. Concerns that were brought forward for the segment include but is not limited to the proximity to existing 500kV transmission line (reliability), heritage and archaeological concerns, quarry leases, and protected areas (existing and proposed). • As the preferred route in relation to the RM of La Broquerie falls predominantly on agricultural lands Manitoba Hydro will be utilizing mostly self supporting structures in the area. These towers range in height (40-60m), require an 80m easement and will span on average 450m apart (3.4 towers per mile). MH provided links to the documents on the website.	
R3-E069	Fri 1/30/2015 12:30 PM		
R3-E070	Fri 1/30/2015 2:50 PM	Hydro pulled together some additional info regarding their understanding of the concerns surrounding the Ridgeland Cemetery including mitigation measures being considered by the project team. MH will bring hard copies of this to the council meeting and please forward to council members as well as others who have demonstrated a concern regarding the cemetery.	

Email Information			
AECOM Index #	Date and Time	Email Summary	ALO / MLO #
R3-E071	Wed 2/4/2015 9:24 AM	KC sent group email to Manitoba Conservation and Water Stewardship tentatively booking a meeting with MH and CWS Feb 13 at 10 am. Individual replied indicating the time works and they 'cc'd a couple managers in the wildlife department if they are interested in attending the meeting.	
R3-E072	Wed 2/4/2015 9:24 AM	KC sent group email to Manitoba Conservation and Water Stewardship tentatively booking a meeting with MH and CWS Feb 13 at 10 am. Individual replied indicating the time works.	
R3-E073	Mon 2/2/2015 10:40 AM	Original email: KC sent SRRCD the MMTP poster outlining all dates for the open houses as per previous phone conversation and have tentatively scheduled the Council to meet with MH March 17, 2015 at 10 am at the SRRCD office. KC will follow up Feb 17 to confirm meeting.	
		Does not want to see anything happen to their property and its proximity so that it would jeopardize the current and future value. Given the huge impact of the proposed construction, it is difficult for the individual to express their view at this point of time to the Preferred Route until I receive an acceptable compensation offered to my property and the other affected property owners. MH replies indicating MH would like to set up a call with individual and gave contact info for MH. Also provided the link to information on the MMTP compensation package and the document library. Individual replies with a series of questions prior to booking a call: 1. The area on my property that will be affected. 2. How to assess the current market value on this affected area. 3. Am I still the owner of this affected area? How would my title to the property affected? 4. No of towers to be constructed on my property. 5. How do you calculate the compensation on these towers. I understand that my property can grow any kinds of crops. 6. What would be the compensation on removal of trees from my property. 7. Future Zoning on my property after construction. 8. Please provide an agenda to the call. MH replies indicating that Many of your questions I am unable to respond to and will be dependent on final design and placement of the transmission line. I hope the responses below assist you in your review of the project. 1) SE 09-03-09E1 – RM of Stuartburn. The blue outlines the proposed centre line of the transmission line and the shaded area outlines an anticipated 80-100m easement. <image001.png> 2) Appraisers will use various methods and tools to calculate market value. Manitoba Hydro representatives will discuss any specific questions landowners have at the time of negotiation 3) You will remain the owner of the property that is affected by the transmission line right-of-way. Manitoba Hydro will enter into easement agreements with private landowners, and the agreements allow Manitoba Hydro to construct and maintain the transmission line, while ownership and use of the land is maintained by the property owner. 4) The precise number and location of towers will depend on final design. Towers are spaced on average 450m apart (3.4 towers/mile). Also, small changes to the route may be made as an outcome to Round 3 public engagement and after the project has been reviewed by regulators. 5) Please review the compensation brochure we have placed on the project website – it explains the approach to compensation and provides some example calculations. 6) Manitoba Hydro construction crews will work with landowners regarding piling or removal of trees on private property. 7) Manitoba Hydro prohibits construction of permanent structures within the right-of-way of the transmission line for safety reasons and to ensure we can access and maintain the transmission line. Outside of the right-of-way there are no restrictions imposed by the transmission line on how you can use or develop your land. In regards to zoning I would suggest speaking with your municipal office. 8) I have attached a landowners form that we will go through with affected landowners. This would be the focus of the call. If you would prefer to complete the form on your own you are more than welcome to. We ask if completing by yourself, you provide as much detail as possible.	
R3-E074	Fri 1/30/2015 5:23 PM	Please let me know if you would like to schedule a meeting. I look forward to discussing the project further with you.	
R3-E075	Tue 2/3/2015 2:22 PM	Landowner responds by thanking MH and indicates he will call next week to schedule a call	ALO 054
		MH informing individual that the maps they requested at at the front at 820 Taylor ready to be picked up.	
R3-E076	Wed 2/4/2015 9:16 AM	MH was informed by MT that landowner did not receive a mile landowner package. MH used meter locations to contact ppl within one mile of the line and we understand we may not have captured all landowners within the mile (land where no meter may be needed/exist). MH utilized tax rolls for those who have the preferred route located on their property. MH put the package in the mail this morning for the individual.	
R3-E077	Wed 2/4/2015 9:07 AM	Initial email: R3 email blast. Individual requested the shapefile of the preferred route. MH provides link to al GIS related downloads, materials, maps, etc that can be found in the document library.	
R3-E078	Tue 2/3/2015 8:53 AM	initial email: R3 email blast. Individual requested the shapefile of the preferred route. MH provides link to al GIS related downloads, materials, maps, etc that can be found in the document library.	
R3-E079	Wed 2/4/2015 8:45 AM	Individual inquiring whether MT, MH and MW are available to sit down between Feb 16-20. MH responded that he will check everyone's availability and get back to him.	ALO 041
R3-E080	Thu 2/5/2015 2:06 PM	Confirming stakeholder meeting with HRB	
R3-E081	Wed 2/4/2015 12:17 PM	MH sketched the modification they were discussing over the phone and attached it to the email via a map.	ALO 138
		Received a note from MT that you did not receive a mile landowner package. MH put the package into the mail this morning. Landowner indicated that there is no dwelling on that property. It was purchased years ago as a woodlot and we have just left it in its wild state. The locals do quite a bit of hunting on it [with or without permission] as it has a spring on its southern edge.	
R3-E082	Wed 2/4/2015 9:51 AM		
R3-E083	Sun 2/8/2015 11:20 AM	I am opposed to the proposed transmission line running by the town of La Broquerie. there is lots of bush/scrub land further east along the Sandilands forest reserve that would be preferable. As we are away from home at this time, we cannot sign the petition at the RM of La Broquerie offices.	MLO 282
R3-E084	Sun 2/8/2015 11:18 AM	I am unable to attend but a interested contractor for the project if you can please send information to (provided mailing address). MH forwarded the request to the purchasing department.	
R3-E085	Mon 2/9/2015 10:33 AM	Would you guys have time week of feb 16-20 th to sit down. MH will speak with others to determine a date/time that works best for everyone. Landowner suggested Feb 20 at 1:30 pm.	ALO 041
R3-E086	Tue 2/10/2015 11:10 AM	Provided project website address.	
R3-E087	Tue 2/10/2015 7:13 AM	Landowner is not in favor of the MMTP or the expansion of the Dorsey Converter Station. MH thanked landowner for their feedback.	MLO 1550
R3-E088	Tue 2/10/2015 7:11 AM	Submitted resume for project. MH provided website link to submit resume.	
R3-E089	Wed 2/11/2015 7:27 AM	Continuation from previous email R3-E083 - I strongly object to a transmission line passing one mile from our Main Street of LaBroquerie. Just beyond this would be countless miles of bush and marginal land. There's even a major Line a few miles further. What is the benefit in this location? Is our RM benefiting financially? MH provided details about the project and route selection and concerns that have been brought up in the LaB area. Provided upcoming open house link.	MLO 282
R3-E090	Wed 2/11/2015 7:24 AM	We will not be attending any of the public engagement activities regarding the manitoba-Minnesota transmission project.	
R3-E091	Wed 2/11/2015 7:23 AM	MH provided details about the project, route selction process and concerns that have been brought up in the LaB area.	
R3-E092	Wed 2/11/2015 7:17 AM	Email continuation from R2 (captured). Landowner received notice that they live within 1 mile of the current preferred route. Why did hydro choose 208 over 207? In your opinion, do we have any chance of convincing Hydro to change the preferred route path back to 207? MH provided details on route selection process, provided details of the challenges in the LaB area and indicated that open houses are beginning again. Provided email and phone number.	MLO 189
R3-E093	Wed 2/11/2015 6:55 AM	MT indicated as a follow up from the RM council meeting last week, MT has spoken with the Manager of Communications and he would be happy to meet with you to discuss fibre optics that are planned with the MMTP. MT will work with AP to find a couple of dates in the next two weeks and will send them your way to see if they work.	
R3-E094	Tue 2/17/2015 8:54 AM	Requesting for MT contact information. MT provided contact info. They provided a letter from the MP titled: Letter to Manitoba Hydro-La Broquerie Feb 13, 2015. Letter indicates that constituents in the RM of LaB would prefer route 207 over 208 as it would have far less impact on residents in the area as 207 is on crown land. Schools and businesses and homes are located within a mile of the preferred route.	
R3-E095	Thu 2/12/2015 11:12 AM	Intrested contractor for the project provided mailing address. MH provided linkto project website for info on the project.	
		President of the Ecole St. Joachim school council to which parents have approached us In protest of route 208. Upon our meeting last night we had a unanimous vote amongst the members against route 208. This Route has the power lines close to both our school grounds with well over 500 students and our parents are concerned. I will be out of town next week and will be unable to attend the open house forum. I would like to submit my opinion that I am against the route 208 going through la broquerie. Having 120 foot tall towers running along our community and golf course would be unsightly. I also live within the 1 mile of the new proposed route #208 through our town of La Broquerie. Having it further east, #207 in the bush would have the additional benefit of being used by snowmobiles / quads in the summer / winter months. As these cut lines in the forest become very beneficial routes for off road travel / snowmobiles etc. MH thanks for providing feedback and it will be documented. Provided links to the project website including info on EMF. Landowner: Being in the electronics industry myself, I understand the Non-issue with the EMF. Please keep in mind that the bulk of the complaints however were the fact that when given a choice of routing these massive towers through the heart of our community or beside it... the choice is quite apparent to keep it beside the community. On a separate topic, I myself am a private pilot and harv's air has a large practice area for training aircraft due south and north of town. Generally speaking we never fly below 1000' agl (above ground level) but we do regularly pick farmers fields to simulate forced landings. Farmer's fields offer the best option for these situations as we are not permitted to fly low over built up housing areas. This route also cuts directly onto the corner air strip located in the curve south of richer on highway 302. There is also a sizeable recreational pilot group whom fly powered parachutes at much lower altitudes. These powered parachutes have a much lower operating speed and as a result are more susceptible to winds. They fly low and slow around the town, I've done this myself. Having these towers so close to town will restrict where they can fly.All our pilots are aware of the two existing large power lines the run north south east of la broquerie, by grouping this new one amongst the other two Makes sense from an aviation perspective. MH thanked for snap shots.	
R3-E096	Thu 2/12/2015 9:59 AM		MLO 258
R3-E097	Thu 2/12/2015 9:46 AM	MH provided links to EMF info.	
R3-E098	Fri 2/13/2015 10:43 AM	Regards to setting up a meeting to discuss fibre optics associated with MMTP. Provided dates as to when the Manager of Communication can meet with RM.	
R3-E099	Fri 2/13/2015 10:39 AM	Provided property map as per conversation during OH in Wpg.	MLO 160
R3-E100	Fri 2/13/2015 10:11 AM	MH thanking for booking a meeting with them on March 17th. You requested information regarding Energy East and I can provide further insight at that meeting.	
R3-E101	Fri 2/13/2015 9:59 AM	I received the information package for homeowners located within one mile of the proposed route. The letter has a reference ID of MLO(1369). I reside in BC. I will be unable to attend the local meetings. The telephone number you list does not accept calls from here. Do you have another phone number? MH provided phone number.	MLO 1369
R3-E102	Tue 2/17/2015 10:45 AM	We received a brochure regarding the Headingley Grand Truck Trail from a member of the public last week, probably at the Winnipeg Open House. It appears we cross the recreational trail in the southern loop portion of the route. I have scanned and attached the brochure for everyone's records. Following up on the RM meeting last week; you mentioned that our team should come down on Feb 20th to discuss the RM owned quarry. What time would you like us to be in attendance? Besides mapping and information regarding compensation, is there any other information you would require. Time has been set aside for 9:30 am -information about tower placement on our properties, that would be of benefit as well, otherwise the maps and compensation with respect to quarries is what we are interested to discuss with your group.Tower placement is not undertaken until final design but we can discuss locations that would best minimize any potential impacts. We will share your preferences with our design team for their consideration when determining final tower locations.	
R3-E103	Wed 2/18/2015 10:43 AM		
R3-E104	Wed 2/18/2015 10:19 AM	I want to thank you again for attending our open house in Zhoda last week. I will move forward the modifications you suggested to me for consideration by the Project team. As we discussed, please take some time to review the attached and provide suggest tower locations which I can then provide to our design team for consideration in final design if the modifications you provided are unable to be accommodated.	ALO 106

AECOM Index #	Email Information		ALO / MLO #
	Date and Time	Email Summary	
R3-E105	Wed 2/18/2015 10:00 AM	I am submitting my concern regarding the new project. Is there a reason the new route isn't being run to the north of the city then down next to Anola? Seems the route going south then north then south is not as direct. Further to my email. I think another meeting place in Winnipeg closer to the south perimeter is warranted, if you really want to hear the opinion of those affected as your flyer indicates. For example, a venue south of Bishop Grandin. MH-We understand that a location further from your home is not preferable yet our public engagement process accommodates personal site visits if you are unable to attend any of our open house locations. We also offer a toll free project information line (1-877-343-1631) where concerns can be addressed and questions answered. If you would like to set up a meeting to discuss the project with a project team members, please contact us to set a time and location. Regarding your email regarding "SafeSpace" and EMF, please see the attached file addressing those concerns.	MLO 1565
R3-E106	Wed 2/18/2015 9:57 AM	Thanks for providing us with information regarding the MB-MN project. We have attended your open house sessions in the past. However, just this morning, I have heard a "rumour" regarding compensation to landowners. A landowner informed me that he/she would NOT be receiving any compensation for land since their property was considered to be "swamp" land. Can you confirm if there is any truth to this or not? MH-Private lands will be compensated. Easement agreements will be signed with private landowners. They will retain ownership and the easement grants Manitoba Hydro access to construct and maintain the transmission line. The landowner will receive payments for towers if they are agricultural lands as we would be taking land out of future production. Provided link to compensation.	
R3-E107	Wed 2/18/2015 9:49 AM	Meeting week of Feb 16 to 20. MH requesting to reschedule for Feb 24th at 10am.	ALO 041
R3-E108	Wed 2/18/2015 9:43 AM	Continuation from previous email R3-E097. You have still not answered my question. MH provided an attachment of the SafeSpace doc.	
R3-E109	Wed 2/18/2015 9:41 AM	Continuation from previous email R3-089 -thanks for the reply but you did not answer my question. Does the RM of La Broquerie stand to benefit financially with this proposed location? MH - At this time, we have made no commitments to date related to any benefit program similar to that of Bipole III.	MLO 282
R3-E110	Wed 2/18/2015 8:37 AM	I attended your open house in La Broquerie this evening. Can you please let me know what the closest distance is between the proposed line and Ecole St-Joachim. MH -The measurement I have based on Google Earth is 1,386m (4,500ft) from the centre line to the southeast corner of the school.	
R3-E111	Wed 2/18/2015 8:28 AM	Meeting scheduled with MIT. MIT- In relation to the meeting, could you confirm if this Project include the line(s) from Dorsey, over the Red River, and along the south embankment of the Red River Floodway?MH-southern loop is considered as part of the MMTP. The project members in attendance at the meeting will be able to discuss all aspects of the project. Provided link to southern loop.	
R3-E112	Wed 2/18/2015 8:18 AM	Continuation of previous email R3-E074. Phone number provided for MH did not work. MH provided the correct phone number.	ALO 054
R3-E113	Tue 2/17/2015 11:49 AM	At that presentation, MT offered to meet with you and any interested council members to provide a more detailed discussion on the routing process for the Project. If this is of interest to council, please let me know some dates and times and we will prepare material to bring to you. We have done this presentation with other interested parties and we find that an hour to an hour and a half is necessary. RM-council would like to meet to discuss. Would you be available Feb 23rd at 5pm. MH will get back to RM shortly.	
R3-E114	Wed 2/18/2015 12:01 PM	Continuation from R3-E113 - MT and MH are available for 5pm meeting on the 23rd. Attached a safe space memo for RM to distribute.	
R3-E115	Wed 2/18/2015 11:55 AM	Continuation from R3-E105 - I am aware of peer and non-peer reviewed literature/research on this topic and feel there has not been enough unbiased research conducted on the health effects of these large transformers/lines. Some research suggests these lines be buried. Is this a consideration? When deciding to build in this area of the city we did so to avoid these types of lines as well as many other "city pollutants". We pay city taxes and receive much less city services than other areas of the city but look past it considering the other benefits we have staying away from these lines, traffic, etc. It has not gone unnoticed that the meetings you have held in the city are placed away, inconveniently from the communities you are affecting. Very unhappy with another Manitoba Hydro project being pushed through to sell hydro to other communities, countries with disregard for our communities happiness and health. MH-As indicated in my previous email, we welcome personal site visits as we are aware of individuals' busy schedules and the need to commute to our venues on specific dates. If you would like a meeting, please let me know and we can coordinate a meeting time and come to a location that is convenient for you. Regarding underground options, Manitoba Hydro prefers overhead lines as there is ample space in the existing right-of-way, and they are cost effective and reliable. Alternatives such as placing lines underground are associated with additional costs, risks, and are pursued by utilities only where there is insufficient space in which to place the transmission lines.	MLO 1565
R3-E116	Wed 2/18/2015 11:44 AM	Continuation from R3-E112 - MH thanking landowner for taking the time to have a conversation with Hydro this morning. As requested, MH provided her email address for further contact if needed.	ALO 054
R3-E117	Wed 2/18/2015 11:34 AM	Following up on phone call this morning. Attached are a few documents as well as links to this email for your review. Also placed a package in the mail for you this morning.	ALO 031
R3-E118	Wed 2/18/2015 11:17 AM	Continuation of R3-E106 - "YES" we have received the information and have read the compensation brochure, which is why we had a "heated" discussion with this individual. He/she is adamant that there will be no compensation for pasture/grassland, only land that is cultivated with cereal/grain (harvest) crops. Apparently pasture/grassland has no compensation value. Which is why I contacted your office. MH-We always encourage individuals to speak with us directly for information. If land is pasture or seeded hay there is a structure impact payment. Landowner-We have encouraged these folks to attend one of the open house sessions and speak with knowledgeable representatives. We are confident that our land will not be deemed worthless and that compensation will be worked out. I would like to think that "big brother" is not taking something for nothing	
R3-E119	Fri 2/20/2015 11:24 AM	Has received permission to invite you to our office in Landmark. I have a few dates to choose from, let me know what works for you. We have 5 people attending from MLAF. MH-asking other's in MH office as to what dates work best for them and for AECOM to add to MSL and doc email.	MLO 482, MLO 483
R3-E120	Fri 2/20/2015 12:06 PM	Provided links to biosecurity policies, anthrax outbreaks, SE MB region prone to incidences of anthrax. MBP can state broadly that the line will cross some cattle producers' operations, although we cannot provide more specific details than that as we do not have a complete inventory of cattle producers in the area traversed by the proposed line nor their legal land descriptions. MBP's primary concerns about the transmission line remain focused on areas such as: ensuring the least possible disruptions to the day-to-day operations of the farm/ranch; ensuring biosecurity practices are adhered to before, during and after construction of the line (i.e. during the maintenance phase as well); maintaining open lines of communications between Manitoba Hydro and producers whose property may be crossed to ensure that producer questions and concerns are swiftly addressed; ensuring that there is fair compensation for affected producers, both in terms of payment for the line crossing their property, or in the event of expropriation. Also at AGM: Therefore be it resolved that Manitoba Beef Producers lobby the Government of Manitoba and Manitoba Hydro to provide detailed assurances that the following will be made available to all agricultural producers: ongoing and substantive two-way discussions about transmission line routes and tower placements; fair compensation, either for line and tower placement on producers' land or in the event of expropriation; a choice of payment methods; access to an independent appeal process producers can use if they are not satisfied with decisions around line and tower routing placement or in relation to compensation or expropriation payments; and, an ongoing mechanism to address any concerns that may arise as lines and towers are built, put into use and maintained.	
R3-E121	Tue 2/24/2015 10:01 AM	Scanned copy of the RM of Tache Resolution.	
R3-E122	Fri 2/20/2015 8:26 AM	Received a package in the mail; it appears proposed preferred route goes through our property and would like to book an appointment when you are in Ste. Anne for Saturday Feb 28th. MH-spoke with MH and she indicated to me that she has been playing phone tag and she apologizes for that. We have around 1 pm on Saturday. Landowner - 1 pm on Saturday works.	ALO 025
R3-E123	Fri 2/20/2015 12:20 AM	Initial email blast sent forwarded as per conversation KC had on Feb 18, 2015. Indicated she has dropped a reminder to call me into Feb 23 week calendar regarding setting up a meeting. MH-SC informed me she dropped off copies of the Valued Components handouts to your office. Are you requiring any other materials at this time? GWE-only materials dropped off at our office by SC was a small box of the R3 bulletin. If she has dropped off VEC handouts she has not communicated this, and I do not know where they are. I have been asking her this week for 50 sets of the materials provided at the Open House in Winnipeg. That would be the VEC handouts plus anything else that was available at the Open House. Manitoba Hydro has an engagement project re MMTP, which includes a staff person, with Peguis First Nation. They need a good supply of all these materials. Perhaps you could solve this tomorrow ?	
R3-E124	Thu 2/19/2015 11:38 AM	Continuation from email R3-E073. SRRCD also had questions regarding the Energy East pipeline coming through their district, would you have any info on this? AECOM - sent reminder email for meeting. SRRCD-The SRRCD board is confident that most of the issues with the MMN transmission line have or are being addressed through each of the respective municipalities and we are not requiring a delegation at this time. Our board meeting has also been postponed from March 17th due to conflicts with municipal scheduling. The Board has requested that we would like to be informed of any changes to the proposed route as a potential outcome of all your current public meetings. Does this work for you? AECOM- removed from the meeting scheduler. SRRCD- MH, I was looking forward to talking to you, maybe we can meet up some other time to talk about the pipeline? MH -I am at the hall above the arena in La Broquerie this evening from 2-8 if you wanted to quickly chat about the pipeline. I am also there Saturday from 11-4. If not, it may need to wait until the 17th as I am out of town for other events until then! SRRCD-Perfect, I'll stop by the arena this afternoon.	
R3-E125	Thu 2/19/2015 11:38 AM	Part of previous email R3-E124. MH - Just noticed AECOM's email regarding the 17th. If you are unable to attend La Broquerie tonight or Saturday feel free to give me a call. Also, we will be submitting a final route with the EIS this summer and if any stakeholder would like a meeting following the submission we would accommodate. SRRCD-As per MH's suggestion, we would like to be contacted for a potential meeting following the final submission to the EIS if possible.	
R3-E126	Fri 2/20/2015 2:12 PM	Continuation of previous email R3-E111. MH was able to respond to your question regarding the southern loop. Confirming the number of people in attendance for the meeting. MIT-there are 12 people confirmed for the meeting on Feb 25th at 10 am.	
R3-E127	Fri 2/20/2015 11:23 AM	Continuation from previous email R3-E119. MH-will forward to project team to see what works best and get back to you shortly.	MLO 482, MLO 483
R3-E128	Sat 2/21/2015 6:00 PM	Can we do meeting after wed. I have a drilling company coming out to do proper test holes on tues. They just called and an earlier date came up. I might need 2 days cause there is a couple gravel companies and a colony that are going to be there. We are drilling down to limestone then at least I know for sure what is there. We dug 34 test holes in Dec but only to 25 ft. Marc said you guys would only do 2 of your own test holes so I will do same. If gravel guys or Hutterite colony want to drill on other parts of pit then we will be there Wed also. If Thurs or Fri work for u great. It will take a few days to get all the final results from sieve screen and sand gravel clay tests. Apparently they bake the gravel to do official clay testing. If the following week works better for you guys that works to. MH- no worries; let me know when would be best for you.	ALO 041
R3-E129	Mon 2/23/2015 8:38 AM	Continuation from R3-E115. I think that it would be great if you could arrange a town hall meeting closer to the south end of the city for the communities involved. One of the schools south of Bishop Grandin for example. I'm interested to know why the route is not being directed north/east of the city which seems the shorter route as well as how the demographics and ratio of population that is affected with that route vs the route to the west/south that has been proposed. MH-Thank you for indicating your interest regarding holding another venue in southern Winnipeg. We had many participants at our Winnipeg Open House from the area where you have a concern. Currently, there has not been any additional requests for venues in Winnipeg. As mentioned previously, we will meet with you and provide all the material that was shown at the open house. Regarding a northern routing option, Manitoba Hydro has been acquiring land along the western and southern edge of the city. The Southern Loop will allow for multiple transmission lines to be placed within a single corridor. This will reduce the number of independent rights-of-way on the landscape and improve system reliability by connecting various stations around Winnipeg. The southern loop begins at Dorsey station located near Rosser and follows the western and southern boundary of the city of Winnipeg terminating near our Riel Station (Deacon's Corner). A map of the southern loop has been placed on the Manitoba Hydro website. Manitoba Hydro has been acquiring property rights for the Southern Loop since the mid 1960s. Manitoba Hydro also entered into an easement agreement with the Floodway Authority in 1985 to accommodate the transmission corridor.	MLO 1565, MLO 482, MLO 483
R3-E130	Tue 2/24/2015 9:39 AM	Continuation from R3-E127. MH-would 1pm on the 11th work for your team?	

Email Information			
AECOM Index #	Date and Time	Email Summary	ALO / MLO #
R3-E131	Tue 2/24/2015 10:41 AM	I am the recent landowner of NE-2-9-7W (top NE corner) where the preferred route for this transmission line will be running directly through my property. I the line will be cutting my property in half and I would like to oppose this. Could you please provide me with information about how to do so and if there are any other routes that can be taken and any general information. I have not received any information in the mail regarding this. Please email back with any information you may have. MH-I have attached a map of your land holding in relation to the preferred route. This route is not final and we are collecting feedback and documenting concerns to assist in determining the final placement of the transmission line. We are currently speaking with local landowners regarding the project and I would encourage you to attend one of the events this week in Ste. Anne. We will be at the Seine River Banquet Centre (dates and times provided). will also be in Richer & Dugald in a couple weeks and venue locations (link provided). Also provided phone number.	ALO 077
R3-E132	Tue 2/24/2015 10:33 AM	I currently have property for sale for a client in the RM of Ste. Anne and would like to confirm that the final preferred route shown on your website is the one being taken. I wish to confirm that the property that I have for sale is not planned to be affected. This property is the Cottonwood Golf Course comprising 300 acres in SW 24-8-7E. Please respond at your earliest convenience as we are currently working on an agreement and this question has just arisen. MH-The closest line in relation to quarter section would be the proposed MMTP. We are currently collecting feedback from local residents and will be in Ste. Anne this evening and will be holding other events over the next 2 weeks. Provided link to website and attached a map.	MLO 147
R3-E133	Wed 2/25/2015 9:31 AM	Please see attached resolution urging MB Hydro to consider and respond to all concerns regarding MMTP. "...the RM of Piney Council urge MB Hydro to consider and respond to all of the effected municipal ratepayers concerns with regard to construction of the MMTP"	
R3-E134	Tue 2/24/2015 1:06 PM	Continuation from R3-E132. If the meeting in Ste Anne is an open meeting I would like to attend, can you tell me where and what time? MH-It is at the Seine River Banquet Centre at 80A Arena Road in Ste. Anne. It is drop in from 3-8 pm.	MLO 147
R3-E135	Tue 2/24/2015 11:23 AM	Continuation from R3-E130. Date and time provided should work. If anyone has contact with a hog production site, we require 2 nights downtime before visiting our office.Regarding our office entrance protocols, you are welcome to park in our lot with visitor parking in front of the building. When you enter the building you will see a disinfectant mat for cleaning your shoes and hand sanitizer. The receptionist will buzz you in and ask you to sign the visitor log. We require photo id please. MH- Will ensure attendees are aware of the protocols.	MLO 482, MLO 483
R3-E136	Tue 2/24/2015 11:17 AM	I own this property with the proposed hydro line coming through it, I thought I would share with you what I have been working on for the last 20 yrs on this property. when I first purchased this property 20 yrs ago it was my full intention to cut lots and build houses on a few of them and the remaining lots were to be my childrens birth right. We made the application to do this in the mid to late 90's and it was approved by the municipality, we made the planned decision to hold off back then on the subdivision and decide to start raising a family, and my wife would remain at home to care for our children until such a time that they were old enough to be legally be left alone after school so she could enter the work force. 2 years ago we entered phase one of our dream plan, one lot was cut, one house was built, with the intention of this house being put up for sale in 2015/16. Two more lots will be cut this spring and the developing the land will be started. The proposed line of the bipole is coming straight through my property, directly where I am planning, and "WILL be", building a house. I am in no way in any approval of this bipole project coming through my property at all, I have been working on this plan to subsidize my retirement and am not about to be deferred from my plan. MH-Upon reviewing your quarter section ID, the Manitoba-Minnesota Transmission Project is proposed to traverse the property and not Bipole III. Provided info regarding open house/landowner info sessions. Provided link to website and attached map of property.	ALO 032, MLO 177
R3-E137	Tue 2/24/2015 10:58 AM	I have attached a pdf of the map you requested to this email. Please let me know if this will work for you or if you require anything further.	MLO 880
R3-E138	Wed 2/25/2015 9:52 AM	Please find attached a copy of the landowner form we completed as well as a summary of our discussions. If you have anything further to add or have any questions please let me know.	ALO 052
R3-E139	Wed 2/25/2015 9:47 AM	Continuation from R3-E131. Regarding the meetings taking place in St.Anne will hydro reps be there all week or only today as listed on your website? MH-I will be present at all venues listed below.	ALO 077
R3-E140	Wed 2/25/2015 9:32 AM	I am writing to obtain permission from Manitoba Hydro to reproduce and use datasets found on the following website (particularly the shapefile representing the MB-MN Transmission Project): (provided link) Our company, Calliou Group, partakes in the Aboriginal consultation process; as such, the shapefiles from Manitoba Hydro will most likely be displayed on maps created for our clients. Is it possible to acquire permission for this particular use? MH - Thank you for the email. I have been informed that the material is all publically available.	
R3-E141	Wed 2/25/2015 9:31 AM	Continuation from R3-E133. MH - thank you for providing the resolution.	
R3-E142	Fri 2/27/2015 11:17 AM	Part of previous email R3-E134-Landowner thanking MH for the info and requesting to resend the map page showing the NE corner of the golf course where the proposed line crosses. MH attached the map of Cottonwood Golf Course in relation to the project.	MLO 147
R3-E143	Fri 2/27/2015 10:08 AM	Continuation of R3-E140- would like to clarify because technically everything on MB Hydro website is publically available. However, their policy still states that nothing from the site can be used in commercial purposes without written permission. Therefore, I am seeking this written permission to use the publicly available shapefiles for a commercial purpose. MH-I have discussed with public affairs and they would require the following information: - Detail on what the commercial purpose is - Who the clients are. They would be granting approval (once reviewed) for this specific purpose only. Response: Calliou Group, in conjunction with its clients, engages in the Aboriginal consultation regulatory process. As such the requested shapefile will be used in maps that we create for our client, the Manitoba Métis Federation. MH - BH who in your department would sign off on teh request based on the info they have provided? BH - This request is approved for the Calliou Group to create maps pertaining to the MMTP project for their client the MMF.	
R3-E144	Thu 2/26/2015 12:11 PM	At the meeting you requested that I do some digging as to why a distribution line was moved in proximity to your property. As I mentioned at the meeting, the distribution line was not moved due to the location of the Manitoba-Minnesota Transmission Project. Here is the information I gathered from various individuals in distribution:Based on load flows, Manitoba Hydro decided to tap a southern line off PR302 to lower the load of other distribution lines. This build/salvage was not in any way connected to the Manitoba-Minnesota Transmission Project and was undertaken to offset local distribution loads ensuring a reliable supply of electricity to users in the area. I hope this sheds some light on the distribution line removal. If you have any further questions, please contact me directly at the number below	ALO 011
R3-E145	Thu 2/26/2015 3:10 PM	Continuation from R3-E129. I'm glad to hear there was good attendance from our area. Thank you for the additional information I had requested earlier regarding the route planning. It helps explain the proposed route. I still would like to know why the north/east was not considered as it looks like a shorter route as it continues on the east side of the province. If you have any additional information on this I would be interested. MH-The northern corridor contains 3 transmission lines whereas the southern corridor does not yet contain any transmission lines (from LaVerendrye Station east). For reliability purposes, Manitoba Hydro would like to keep infrastructure utilized for the same purpose separated in order to minimize the likelihood of one extreme weather event (such as wind) impacting lines that serve a similar purpose. The Southern Loop will allow for multiple transmission lines to be placed within a single corridor. This will reduce the number of independent rights-of-way on the landscape and improve system reliability by connecting various stations around Winnipeg. The southern loop begins at Dorsey station located near Rosser and follows the western and southern boundary of the city of Winnipeg terminating near our Riel Station (Deacon's Corner). A map of the southern loop has been placed on the Manitoba Hydro website	MLO 1565
R3-E146	Tue 3/3/2015 1:52 PM	Thanking HyLife for meeting with Hydro on Feb. 6 to discuss the MMTP and sharing concerns. In our discussions you indicated a preference for the route to not cross through your property that is used for calving. We further discussed that if the transmission line does run through this property you would prefer that self-supporting structures be used and the bases of these towers fenced to prevent your livestock from becoming entangled in the tower structures. I noted at the time that we had initial plans for tower types developed, and can now confirm that the current plan is to use self-supporting structures on your property. Finalization of tower type will occur after we have taken soil samples in the area to confirm the ability of the terrain to support the tower foundation.	ALO 057
R3-E147	Tue 3/3/2015 12:50 PM	I attended and was very sad on the outcome of presentation. MH-I would like to indicate to you that this route is not final and we are collecting feedback and documenting concerns to assist in determining the final placement of the transmission line. We will continue collecting feedback and we will determine the final placement of the transmission line this upcoming summer when we file the Environmental Impact Statement with Manitoba Conservation and Water Stewardship. Please ensure you have signed up for project email notifications on the project website (www.hydro.mb.ca/mmtp) to be informed of upcoming steps in the regulatory review process.	ALO 062
R3-E148	Tue 3/3/2015 12:48 PM	Please see the attached letter in regards to the proposed transmission project and its proposed route through my property in Sundown within the Piney municipality. I have requested that CNof the Roseau River Anishinaabe First Nation attend on my behalf. I am undergoing chemotherapy for stage 3 cancer at this point in time and will be unable to attend. I will know more about my schedule once the planned Piney meeting has occurred. MH-Thank you for taking the time to share your feedback with the project team. Please find attached a response to your letter as well as the Landowner Form completed by Charlie Nelson on your behalf in Piney Manitoba.	ALO 134
R3-E149	Tue 3/3/2015 11:48 AM	Continuation from R3-E057 - KC sent a follow-up email regarding the MMTP and if they would like to schedule a meeting with Hydro. She indicated that she has reviewed the info provided and will attend one of the upcoming open houses but doesn't think a meeting with their office is required at this time. AECOM forwarded this email to MH as an FYI.	
R3-E150	Wed 3/4/2015 11:42 AM	AECOM forwarded a follow-up item from Zhoda open house comment sheet. MH requested BA to send a E sized file of Map 3 to the attached address and to send the cover letter to AECOM for documentation when sent. BA forwarded follow-up letter to be filed.	
R3-E151	Wed 3/4/2015 12:02 PM	I have some questions regarding the transmission line. Could you please call me. MH-Replied by phone – March 3rd at 5pm. Contact back at 12pm March 4th. Discussion included: - Why the southern loop and not a direct route south or north of the City. - Bipole III – west vs. east - Process for determining the transmission line - Southern loop land acquisition - Utilize crown lands where possible - Compensation for agricultural operators	
R3-E152	Wed 3/4/2015 6:52 PM	When we met this evening at the MB Hydro information meeting you offered to send me a copy of the study that outlines planned future development along the transmission line corridor. As I mentioned at the meeting I was surprised to learn that there are not one but two transmission lines planned within 5 years along the corridor that runs west and south of Winnipeg. I was shocked to learn that this number may swell to 4 or 6 lines within the next two decades. BH-We looked into the report that I mentioned to you at the Open House, but it did not address your question. However, the following information is pertinent to your question about transmission lines in the corridor that runs west and south of Winnipeg. This corridor is what Manitoba Hydro refers to as the "Southern Loop." It is a dedicated transmission corridor that will accommodate multiple transmission lines necessary for system reliability and to meet future energy demands in the Province. The southern loop begins at Dorsey station located near Rosser and follows the western and southern boundary of the City of Winnipeg terminating near Manitoba Hydro's Riel Station (Deacon's Corner). A map of the southern loop is on the Manitoba Hydro website: As you may know, presently there are two new projects (MMTP 500kV (in-service 2020) and the LaVerendrye-St. Vital 230kV transmission line (in-service 2018) proposed for the Southern Loop. Additional infrastructure could potentially be developed over the next 15 years and the Southern Loop currently has sufficient width to house additional transmission lines. At this time, we have not identified how many lines at what voltage level will be required. Answers to these questions depend on various possible development scenarios that are uncertain at this point in time. The Southern Loop reduces the number of independent rights-of-way on the landscape and improves system reliability by connecting various stations around Winnipeg. Manitoba Hydro has been acquiring property rights for the Southern Loop since the mid 1960s and also entered into an easement agreement with the Floodway Authority in 1985 to accommodate the transmission corridor. Landowner: will be sending in my forms from the OH with a list of concerns identified when I return next week. BH-forwarded to MH as FYI.	MLO 940
R3-E153	Thu 3/5/2015 10:13 AM	It was nice to meet you and your colleague last night at the Headingley open house. I have forwarded your contact information as well as the files you provided to me and am awaiting a response as to who within Manitoba Hydro is responsible. Also, we have added you to our contact list and we have (contact) as our primary contact for TCPL. I mentioned the map viewer to you both last night - you can access it here (website)	
R3-E154	Thu 3/5/2015 10:00 AM	We held an open house in Headingley last night for the Manitoba Minnesota Transmission Project. We had two different individuals come in and indicated that where the ROW hits PR241 the tower sees to make a substantial noise outside of the usual hum. He explained this as more of a gallop of the conductor. Indicated it rattles and shakes and it is audible from 1000 ft away along Wescana Road. Curtis indicated someone could call him if they wanted more information but I am hoping this could be directed to the appropriate division/department. Email had a map showing the location. Customer Service: We have forwarded your request to the Fort Garry Customer Service Centre for review and action.	

AECOM Index #	Email Information		ALO / MLO #
	Date and Time	Email Summary	
R3-E155	Thu 3/5/2015 8:54 AM	I was speaking with Reeve last week about setting up a meeting to discuss fibre optics associated with the Manitoba Minnesota Transmission Project. The Manager of Communications at Manitoba Hydro (Al Pinder) and I would be happy to meet with Reeve, and wonder what his availability would be on the following days: Feb 18 Feb25, Feb 27. Would you please pass this message on to Reeve and lets us know which date and time works best for him? CAO - the 27th works best at 1pm. I have to postpone this Friday's meeting. I getting a visit from [visitor]. Can we re schedule ? Throw me some dates. Sorry. MH-How about 2pm on March 9th. Shall we still meet you at the RM office in Vita?	
R3-E156	Thu 3/5/2015 8:53 AM	Manitoba Hydro representative called the landowner regarding their Section. Owns 40 acre rectangle in the south-east area of the ¼. Plans to build in the preferred route RoW in the meadow area where there is currently a shed and old school bus. Would like to see preferred route moved to the west side of the existing 230kv line as indicated in the attached map.	MLO 648
R3-E157	Thu 3/5/2015 8:46 AM	Map attached with route adjustment.	
R3-E158	Mon 3/9/2015 8:46 AM	s per our phone conversation this morning, please find attached a revised letter regarding Council Resolution #99-15.	
R3-E159	Sun 3/8/2015 9:10 PM	Continuation from R3-E148. Landowner attached an updated version of the questionnaire that had been completed by CN of the Roseau River Anishinaabe FN at the Piney meeting. I have filled in and corrected some of the answers that CN had originally filed so as to be more accurately representative as possible. If you need clarification, please feel free to contact me via email. MH-Thank you for taking the time to update your form and providing us with more detail regarding your land holdings. We will keep you informed as we move forward in determining the final placement of the transmission line.	ALO 134
R3-E159	Sun 3/8/2015 9:10 PM	Part of R3-E158 - attached is the updated questionnaire provided by the landowner.	ALO 134
R3-E160	Fri 3/6/2015 5:19 PM	Continuation from R3-E153 - Thanks for taking the time to meet with us and explain the project. I would like to know, the contact information of the person for the HVDC transmission Line and 230 KVAC transmission Line in order to be sure that an Interference Study will be performed and the respective mitigation (if required) will be in place before the energization of each respective Transmission Line. Thanks.	
R3-E161	Fri 3/6/2015 3:36 PM	Original email blast. CWS-Thanks for meeting with Parks and Protected Spaces regarding the Manitoba-Minnesota Transmission project as presented to Conservation and Water Stewardship (CWS) on February 13, 2015. Further to the discussion at the meeting, Parks and Protected Spaces strongly supports the current preferred route as opposed to the previous preferred route dated 2014 01 07, specifically we have concerns with segment No. 207, for the following reasons:Segment No. 207 crosses twice through Hugo Wetland proposed protected area. Protected areas are land, freshwater, or marine areas where logging, mining, hydroelectric development, oil and gas development, exploring for or harvesting peat, and other activities that significantly and adversely affect habitat are prohibited by law. The proposed protected area contains both uplands and low wet areas. It captures an intact wetland complex including vegetation cover such as wetland meadows, tamarack, and black spruce muskeg. It contains rare or uncommon species including ram's head lady's slipper, golden-winged warbler, and mottled dusky wing. Segment No. 207 crosses through the northern part of Hugo Wetland proposed protected area by paralleling an existing transmission line. Although this keeps the disturbance near an already disturbed areas it would still impact the overall ecological integrity of the site. Segment No. 207 crosses the southern part of the proposed protected area through an area that is currently undisturbed. The enduring features in both the north and south part of the proposed protected area are underrepresented in the protected areas network and therefore are being targeted for protection. The current preferred route as presented at the Feb 13/15 meeting doesn't not run through Hugo proposed protected area and is therefore the route supported by Parks and Protected Spaces.	
R3-E162	Fri 3/6/2015 12:20 PM	landowner: do you guys have time to sit down? MH->> Let me know your best dates and preferred time of day to meet and I will try to coordinate. Landowner: Normally any day other than wed. Anytime. Sooner the better. MH-Would 10am on Tuesday March 10th work? Landowner-Sure. Still Taylor Ave ?? MH-Taylor would be great. I will book us a room. Please sign in with Security. See you Tuesday at 10am.	ALO 041
R3-E163	Tue 3/10/2015 9:08 AM	Part of R3-E158 - attached is the letter from landowner about property.	ALO 134
R3-E164	Mon 3/16/2015 10:31 AM	MH emailing attached meeting minutes, MMTP fibre connection opportunities, picture of a OPGW Splice enclosure and picture of OPGW as per their meeting in Vita. Attached letter states As we discussed at our March 9, 2014 meeting in the RM of Stuartburn offices, Manitoba Hydro is planning on installing fibre optic cable along the transmission line associated with our Manitoba Minnesota Transmission Line Project (MMTP). Although the primary purpose of the fibre optic link is to provide power system protection and control there will be sufficient capacity to permit other uses such as commercial telecom opportunities that may arise within the area of the proposed line. Once the route is finalized we will begin our planning for splice access points which for this system will be approximately every 3 to 5 kilometres. If there is an initiative at the community level to take advantage of the fibre system it would be helpful for you or your technology partner to engage us as early as possible so that we can plan the system to ensure access points are located as close as possible to where the service is to be delivered which will greatly reduce customer access costs.	
R3-E165	Mon 3/16/2015 10:33 AM	Initial email blast from MH about R3 preferred route. CWS thanks MH for meeting with Parks and Protected Spaces on Feb 13, 2015. Parks and Protected Spaces strongly supports the current preferred route as opposed to the previous preferred route dated 2014 01 07, specifically we have concerns with segment No. 207, for the following reasons: Segment No. 207 crosses twice through Hugo Wetland proposed protected area. Protected areas are land, freshwater, or marine areas where logging, mining, hydroelectric development, oil and gas development, exploring for or harvesting peat, and other activities that significantly and adversely affect habitat are prohibited by law. The proposed protected area contains both uplands and low wet areas. It captures an intact wetland complex including vegetation cover such as wetland meadows, tamarack, and black spruce muskeg. It contains rare or uncommon species including ram's head lady's slipper, golden-winged warbler, and mottled dusky wing. Segment No. 207 crosses through the northern part of Hugo Wetland proposed protected area by paralleling an existing transmission line. Although this keeps the disturbance near an already disturbed areas it would still impact the overall ecological integrity of the site. Segment No. 207 crosses the southern part of the proposed protected area through an area that is currently undisturbed. The enduring features in both the north and south part of the proposed protected area are underrepresented in the protected areas network and therefore are being targeted for protection. The current preferred route as presented at the Feb 13/15 meeting doesn't not run through Hugo proposed protected area and is therefore the route supported by Parks and Protected Spaces. MH responds thanking for meeting and comments provided.	
R3-E166	Tue 3/10/2015 12:08 PM	Individual lives on 80 acres near the RM of Tache in the Ste Genevieve area. We bought the place to subdivide and build our dream house And my business along with our hobby farm. We have cut many trails through out our acreage for animals we feed deer and have brought lots to our property, along with hanging many bird feeders and bird houses through out. As MMTP plan comes to an end ,MH plans to cut property in half and takes out 14 acres of land exactly where house is to go.If that's the case the house and property will be up for sale As my wife won't live anywhere near a hydro line like that that is gonna affect us and kids and a pain in the ass for people trespassing and everything else that comes along with that. This line can be moved east onto crown land where it won't bother so many people and there is no reason it shouldn't or can't be moved there. I know how terrible this line is, i am a dozer and excavator operator I've cleared lots of bush infact the company I work for has a 300km contact for bipole right now in split lake and I refused to go. I here the stories and problems they have up there with people. I really hope this line gets moved east or at least off my property and I would appreciate a reply back. MH replied describing EA process and explains that MH can develop an access management plan to mitigate for unwanted access on the ROW including fencing, gate, signage. MH provides 4 links and attaches 1 documentat on EMF.	ALO 066, MLO 173
R3-E167	Tue 3/10/2015 1:47 PM	Initial email: MH indicates they have forwarded your contact information as well as the files you provided to me and am awaiting a response as to who within Manitoba Hydro is responsible.MH provides link to mapviewer. Individual replies and requests the contact info of the person for the HVDC transmission Line and 230 KVAC transmission line in order to be sure that an Interference Study will be performed and the respective mitigation (if required) will be in place before the energization of each respective Transmission Line. MH provides a contact regarding any discussions regarding studies/mitigation regarding MH Trans.lines and TransCanada Pipelines. MH provides current status of MH's other transmission line projects and provides project links.	
R3-E168	Mon 3/16/2015 10:26 AM	Recently purchased 50 acres of paradise, no traffic, wildlife, 30 acres of marsh/swamp to the east, guaranteeing no neighbours. Feed wildlife, see a dozen deer daily. No human traffic. Not interested in having an unobstructed view of two 200 foot towers an a major hydro line. Lines are notorious for inviting quad/snowmobile traffic (and deer hunters), which will disturb us the marshland wildlife. Landowners sent two links (one video and one article) about their property and opposition to the line. MH replied indicating that route is not final and are continuing to collect feedback and document concerns in determining final placement of the transmission line and will file EIS with MWS this summer. Described access management plan to mitigate unwanted access.	ALO 025
R3-E169	Mon 3/16/2015 10:15 AM	Landowner frustrated with proposed Hydro line and had family out to look at proposed location. Would like to meet after 5:00 pm to chat about the route. MH replied suggesting Wed March 18, 2015 5:30 at Taylor Ave. Indicated computer, TV, and various data sets will be available to review their land holding.	ALO 077
R3-E170	Fri 3/13/2015 12:09 PM	Individual indicates they looked very closely at the map in the Southwester paper. The power line from Dorsey to Riel It looks to be a lot longer then going the north side of the city with only one river to cross, compared to three on the south route. I'd be pleased to hear your answer or answers as to the route and the cost factor of each. MH describes "southern loop" and that the corridor will accommodate multiple transmission lines necessary for system reliability and meet future energy needs. Provides MH link to map of southern loop. Indicates the southern loop reduces the number of independent rights-of-way on the landscape. MH has been acquiring property rights since the mid 1960s and also entered into an easement agreement with the Floodway Authority in 1985 to accommodate the transmission corridor.	
R3-E171	Thu 3/19/2015 3:27 PM	Delivery returned to MH. Canada Post delivery orinally sent to Ship To: 2102- 9 Cresnet Place, Toronto ON M4C 5L8,CANADA. Package delivered and was held at post office with no pick up and returned to MH. MH looking into contact information.	
R3-E172	Wed 3/18/2015 3:21 PM	Concerned of proposed lines near schools in LaB.This will not only be detrimental to the safety of our children near the lines, but during the constructicon. Children need that green space to run, play and socialize with their community. This will negatively affect many children, as well as community and after school programs that use that green space by the schools. MH-safety is of primary concern during construction for all members of the public. Provided some info on EMF, access, along with links to various brochures.	
R3-E173	Wed 3/18/2015 3:13 PM	If the US does not want our dirty oil anymore why should they have our clean power? MH - Manitoba Hydro maintains some of the lowest electricity rates in North America and exports surplus power to neighboring provinces and states as part of revenue generation. These exports offset domestic rates. From 2003-2012, revenue from export sales contributed a larger share (33%) of Manitoba Hydro's total revenue than residential customers in Manitoba (27%). Manitoba industrial and commercial customers accounted for the rest. Provided link to Hydro's exports sales.	
R3-E174	Wed 3/18/2015 9:36 AM	The information on our website regarding the Manitoba-Minnesota Transmission Project – Round 3 is now outdated. Can we replace it with the attached notice, or should there be more detail? Please let me know, and we will have the webmaster update the page. MH-The information in this email notices summarizes the current status of our project and provides your members with the appropriate contact information (email, website and phone line) to share feedback. If possible, could you please add a notices which states that we will be holding a "Trapper's Open House" to share the preferred route and collect feedback. The trapper open house takes place on April 9 from 4 to 8 p.m. at the Steinbach Legion Hall, 294 Lumber Ave. Refreshments will be served.We will forward you a poster/advertising to share with your members once finalized.	
R3-E175	Tue 3/17/2015 3:16 PM	The landowner indicated they would like to see the tower placement directly east of their home as there are no east facing windows and the front of the home faces north	ALO 066

Email Information			
AECOM Index #	Date and Time	Email Summary	ALO / MLO #
R3-E176	Tue 3/17/2015 9:46 AM	Landowner: attached is a letter that includes our completed survey form from the 12 Feb open house. Please acknowledge receipt of our email and ensure that our concerns are noted in the outcomes from the consultations. MH-Thank you for taking the time to provide your concerns and modifications regarding the southern loop corridor. We will keep you informed as we move forward in determining the final placement of the transmission line that we will file with regulatory authorities during summer 2015.	MLO 940
R3-E177	Tue 3/17/2015 9:06 AM	Continuation from R3-E171 - The date/time proposed should work for us.	ALO 077
R3-E178	Fri 3/20/2015 2:32 PM	I am following up on a conversation we had at the Manitoba-Minnesota Transmission Project Open House at the Headingly Community Centre on March 4 th regarding EMF from transmission lines. Provided info regarding EMF along with links to the Hydro website.	
R3-E179	Tue 3/24/2015 9:11 AM	I am curious as to why the transmission line does not follow the Monominto transmission line as to me this would make much more sense from a maintenance perspective. If the line could share the right of way and access roads as you have them less than a km apart. This would save on future maintenance cost of brush control and access maintenance. I am sure there is a good reason but I am curious as to why you do not want the lines to follow on the south side of highway 1. It appear like there is a large detour to the north east. MH-left you a voice msg and provided MH's phone numbers. Landowner-my question remains that I am wondering why the line deviates from the monominto transmission line and runs in areas where there is brush to clear instead of going in open prairie.	MLO 385
R3-E180	Tue 3/24/2015 8:32 AM	Scheduling a meeting with Nature Conservancy for March 24, 2015 from 3 pm to 4:30 pm. Nature Conservancy provided discussion topics consistent with previous meetings with MT. Letter attached.	
R3-E181	Mon 3/23/2015 11:32 AM	Continuation from R3-E174 - attached is the advertisement for the MMTP trapper's open house. If you could post this poster to the website we sure would appreciate it.	
R3-E182	Mon 3/23/2015 12:56 PM	Continuation from R3-E181 - I've asked our webmaster to put this on our site.	
R3-E183	Tue 1/27/2015 8:43 AM	I had a gentleman call today who sold his property to Manitoba Hydro in 1977. It is the ROW just south of Dugald, Anora and Grass. He called regarding right of way but I hope you can help me answer his question. He currently farms the RoW attached to the land he owns. He is interested in selling his land and wants to know where he can find documentation that indicates he can continue to farm the RoW even though he no longer owns the land. I spoke briefly to a Manitoba Hydro representative who indicated that he is probably supposed to be paying rent to MH to farm the land but as MH is not typically on top of these things he probably has continued to use the land without paying any rent. Would this be correct or is there some way he could receive some indication in writing that he is in fact entitled to farm the RoW? ROW Agent-If you can provide me with the gentleman's name and the legal description of his land we could search our leasing records to see if there is a current lease in place and if not do some further digging to see we can find. MH-provided name of landowner and quarter section. ROW Agent-found a cultivation permit for that landowner. sold his land to MH in 1977 the Permit identifies that he could continue to farm the MH Right of Way. However, Clause 9 of the Permit states "That the rights and licenses granted to the undersigned by Manitoba Hydro shall not be assignable or transferable in whole or in part by the undersigned" such that if individual were to sell the land the new owner would be required to apply through our Secondary Land Use Program and enter into an Agricultural Lease for the property which would have an associated rental fee being the proportional share of the Taxes. RG-landowner was happy to find out. Provided phone number for ROW Agent to contact him. ROW Agent-will call him this morning (Jan 27, 2015)	
R3-E184	Wed 3/25/2015 9:32 AM	Part of email chain R3-E123 - AECOM following up on conversation we had a little while back about setting up a meeting with Hydro to discuss MMTP. GWE-indicated she would like to meet with Hydro and requested for AECOM to contact her again Easter Monday.	
R3-E185	Wed 3/25/2015 9:11 AM	This email is a follow up to a meeting Manitoba Hydro had with the RM of Piney Reeve and Council on February 23 rd regarding the Manitoba-Minnesota Transmission Project. During the meeting the RM of Piney had requested contact information for contract and employment and Training opportunities. Provided a few links along with a toll free number.	
R3-E186	Tue 3/24/2015 3:22 PM	Have you had a chance to show your colleagues the two degree pitch change that we are pleading for? I need you to help us get that tiny victory locked down. Pls don't forget about us we need the pitch change (at the very least) to happen for our sanity! We have been very calm with hydro at every meeting considering how much crap we are being put through. I only hope my good behaviour at these meetings can help in my favour. I just can't stand the waiting game so pls keep me informed. I know it's only been less than a week since we met but I'm still worried as much as ever. I need you to make this pitch change happen 100%. Thx for your patience. MH - I have shown my colleagues the modification we have discussed but unfortunately we are still gathering information from both the public engagement process as well as the environmental assessment. We must continue with the routing process which takes in all considerations and we will not be in a position to inform you of the final placement for a few months time. I know this is not the answer you were looking for. My apologies for the length of time it takes to review all the information and make a decision. I will keep you informed as I receive more information.	ALO 077
R3-E189	Mon 3/30/2015 10:54 AM	MH provided individual with information regarding the EPRI-GTC siting methodology responding to their questions. Provided link for further information on MH balances numerous perspectives in routing process.	
R3-E190	Mon 3/30/2015 10:52 AM	MH providing response to follow up questions from completed comment sheet. MH is in the midst of undertaking a rural property evaluation to enhance understanding of the potential effects that have been raised through the past environmental assessment processes and the feedback received throughout the public engagement process. This study will be available to the public when Manitoba Hydro submits the environmental impact statement for the project to our regulators (anticipated to be in summer 2015). MH provided a link for more information about what will be included in the evaluation. MH provided links to information regarding impacts to wildlife, noise levels and viewshed. MH thanked individual for providing a route modification.	
R3-E191	Mon 3/30/2015 10:50 AM	MH providing response to follow up questions from completed comment sheet. MH provided link to environmental assessment information sheets. Also in regards to understanding the reasoning for the selections made regarding the route as based on the selection criteria explained in Round 2, these were not the principal factors taken into account in choosing the route in La Broquerie area (minimal disruption/risk... to human activity and health...). MH described the route selection process ie how well routes balance potential effects to human, technical and natural environments from the start to the end point. Data gathering, on the ground field work, and the input of numerous technical specialists, the public, and stakeholders over the course of two years have been taken into account when making this decision. Manitoba Hydro believes that the route presented best balances perspectives on the landscape and concerns that have been brought forward to date. Challenges exist in selecting any transmission line route. Manitoba Hydro evaluates routes from start to end point. In the vicinity of La Broquerie, the following concerns have been identified: <ul style="list-style-type: none"> Potential effects of the project along the more western route that were considered in the selection process include: a greater prevalence of privately owned lands, concerns related to the impact on property values, the proximity of the proposed route to homes near Labroquerie (from the edge of the ROW), the potential impact on proposed subdivisions, and agricultural land uses. The more eastern route would travel through an area of relatively intact habitat that interconnects protected conservation areas and supports a number of valued species. The route would also effect an area noted for cultural and heritage value that is valued as a resource use area by the public, First Nations and Metis. From a technical perspective, this option is in much closer proximity to the existing 230kV and 500kV international power lines which poses a greater risk to system reliability should severe weather (e.g. wind events, icing, tornados, or fires) occur in the region. MH provides link to info on route selection. 	MLO 700
R3-E192	Mon 3/30/2015 10:49 AM	MH providing response to follow up questions from completed comment sheet. MH describes route selection process and outlines concerns identified for La Broquerie. Link is provided to more information describing route selection.	
R3-E193	Mon 3/30/2015 10:48 AM	In response to individual's request at an open house, MH provided a summary of the modifications and additions the Glenboro South and Dorsey Converter Stations for the project below. Manitoba Hydro will also include a detailed project description in the environmental impact statement which is anticipated to be submitted to the regulators in summer of 2015. This document will also be made available to the public.	
R3-E194	Mon 3/30/2015 11:50 AM	MH indicates that they received landowner's package this morning. Thank you for taking the time to complete your form. We will review your information as well as feedback provided from our environmental assessment team and other members of the public to determine the final placement of this transmission line.	ALO 074, ALO 086
R3-E195	Thu 3/26/2015 10:20 AM	Curious as to why the transmission line does not follow the Monominto transmission line. If the line could share the right of way and access roads as you have them less than a km apart. This would save on future maintenance cost of brush control and access maintenance. I am sure there is a good reason but I am curious as to why you do not want the lines to follow on the south side of highway 1. It appear like there is a large detour to the north east. MH followed up by telephone: One mile from line and had general questions about the project. Main interest was why in the Ste. Genevieve area we did not parallel R49R for a longer stretch of time. Noted that homes would need to be purchased or relocated. He understood the rationale for the split at the RM of Tache quarry following that explanation. Had questions about what type of technical considerations were considered in determining the route. Other discussion topics included: <ul style="list-style-type: none"> - Routing process overall - How cost and public input is factored into decision making - Minimize other ROWs from a cost perspective and maintenance perspective - Discussed how quarries, zoning and subdivisions are taken into consideration for routing - Discussed difficulty in routing a transmission line in close proximity to the city of Winnipeg. No follow ups required. Left number with him if any further questions come up.	MLO 385
R3-E196	Mon 3/30/2015 2:17 PM	Manitoba-Minnesota transmission line will cut through the heart of some property? Do we as Canadian, Manitoba born taxpayers have any say over where the Hydro line is proposed? We can attend all the open house meetings, and one on one we want to and still end up with only one thing? Hydro will pay you a fair market value to buy or rent your land? for the easment required to place the structures and run the overhead lines? OR As many were told " It will be expropriated nevertheless? So we have to be stepped on, walked on and have to put up with what ever someone from our Government and utilities wants to do! I'm sure that there will be a few owners of the land very upset? The towers will start to lean and you will wonder why? Put a tower up in your back yard? My dad will roll over in his resting place, once the construction moves in? Why not stick to the right of ways as the municipalities have mapped out for us all, We should not just decide to build what we want where we want to. "Stick to the mapping No short cuts." Why don't you go over the city instead of around it? You don't own the land, which we own, and worked hard to hold on to it? My thoughts are: Stay off my land. Unless you can use SKY HOOKS: go Ahead? MH response: provided info on route selection process, easement agreement info, and provided links to website.	
R3-E197	Tue 3/31/2015 2:18 PM	My name is SC and I am coordinating with Sagkeeng First Nation representatives as they work to develop a traditional knowledge study for Sagkeeng First Nation in the MMTP study area. This study is in development, and I would recommend you contact Doug Boyd for further information.	

Email Information			
AECOM Index #	Date and Time	Email Summary	ALO / MLO #
R3-E198	Tue 4/7/2015 12:25 PM	Writing on behalf of ALO048 (father). Father did fill out a form along with myself and husband (MLO369). The lady at the meeting completed one form for both of us. We have 5 acres off of my dad land, therefore she said the form would be the same. Unless she forgot to make him fill out a separate form because the route would cross on his land that he owns or she lost our form which would mean that she lost our landowner form too. I would appreciate that you look into this matter and if you have any questions or concerns please contact me. MH - we have your fathers form and it's attached as requested.	ALO 048 (MLO 369)
R3-E199	Fri 4/10/2015 11:49 AM	Continuation of R3-E184 - Suggested a meeting on April 20th or 21st. MH-MH would be available at 10 am Friday April 24th as from the 20th to 22nd does not work for their team.	
R3-E200	Tue 4/7/2015 10:51 AM	I read your notice in the carillon news dated April 2nd Why are all the towns blacked out?? CAN YOU EXPLAIN THIS TO US.?? I guess hydro doesn't want the TRAPPERS to know where the line is going ,why?? MH - Due to the size constraints of the newspaper there was a need to make the advertisement more legible. We have been working with these trappers and the Manitoba Association since the onset of this project and encourage their participation in our process	
R3-E201	Tue 4/7/2015 9:16 AM	does MB hydro have a line limit or distance they start objecting to subdivisions on?? When is a good time to call u?? MH- provided time he will be around for a call.	ALO 041
R3-E202	Wed 4/8/2015 3:08 PM	Your come-and-go consultations in the region were quite ineffective as forums for the ordinary citizen, because while the corporation has the opportunity to show what it intends to show, there was no allowance for the populations affected to come together as a group to have frank discussions and ask their questions together about the proposed project. I therefore, at the least, cannot let pass your invitation to give my opinion by email on your present, and very expensive, initiative, although I would have preferred a few evening town hall meetings to discuss it together with you and the community. Having talked with my neighbours about this proposed hydro project, I can speak for them when I say that these massive skeletal steel structures and suspended wires would permanently mar the beautiful landscape of the surrounding Eastern Highlands, and cut through a well-populated, valuable real estate swath of land, degrading property values everywhere they pass. To us, they represent an intrusion into our quiet, healthy country environment, and into the beautiful community we are trying to build here. There is also the issue of the powerful electro-magnetic fields that would be emitted, from two directions in our case, spreading their nefarious effects on human and natural life and degrading our quality of life and natural habitat. Will we ever be compensated for the losses in quality of life, and for the losses in property values, not to mention the losses we will all eventually suffer health-wise? This costly project seems to be serving the interests of Americans and multi-nationals south of the border, who are getting our electricity at bargain-basement rates. All we Manitobans are promised are ever-higher electricity rates.If a hydro transmission corridor must be traced, as a good corporate citizen, Manitoba Hydro must make sure it will be infringing on the least-populated regions possible, and therefore not the presently indicated "preferred route", but perhaps way farther east. Quite frankly, I don't understand why the overall proposed transmission route needs to trace such an indirect route from northern Manitoba through southern Manitoba. It seems to be going all over the province, before heading south via our highly populated corner of the province. MH - provided info on route selection, env. assessment, regulatory review, addresses public engagement, provided links to website and discussed rates.	
R3-E203	Wed 4/8/2015 2:56 PM	Confirming meeting for tomorrow at 3pm in Landmark. Meeting confirmed.	
R3-E204	Wed 4/8/2015 12:45 PM	Continuation of R3-E169 - Landowner and I are still very concerned with the potential outcome of the final route. I hope you and your team realize that this 2% change that we spoke about would help us immensely. It would be over 100 ft farther away from our building site, which would lessen the health concerns that we have about living so close to it and it would also take it out of our view a bit more. We really need this to happen and don't think it's too much to ask as Hydro is going to be splitting our property in half! When we had our meeting we did not talk very much about the environmental assessment and what we can do to make our point heard in that respect as well. Could you give me some info on what we should do? MH- Provided response he emailed landowner a few weeks back. I have shown my colleagues the modification we have discussed but unfortunately we are still gathering information from both the public engagement process as well as the environmental assessment. We must continue with the routing process which takes in all considerations and we will not be in a position to inform you of the final placement for a few months time. I know this is not the answer you were looking for. My apologies for the length of time it takes to review all the information and make a decision. The meeting summary, your comment sheets, your landowner forms have all been documented and will be filed with the environmental assessment for regulatory review. The information the public engagement team collects is then passed on to discipline specialists to enhance their assessment of various valued components. Both of you will have a chance to review and challenge any of the information we submit in the environmental assessment when we file with regulators this summer.	ALO 077
R3-E205	Thu 4/9/2015 12:02 PM	MH providing response to follow up questions from phone call. A hard copy of the landowner form package is being sent out to you. Also attached a map of the preferred route which may potentially affect your property (NE-26-3-8-E). Provided info on EMF and links to website.	ALO 026
R3-E206	Thu 4/9/2015 10:30 AM	I needed to indicate to your office that the property on the south side of PR201 backs onto the Sundown Bog, a wetland area that is indicated on maps of the area. I am adding this information to your office in addition to the information provided in the form that I was asked to fill in. MH - Wetlands are being assessed as part of the EA. Provided links to the vegetation and wetland handout.	ALO 134
R3-E207	Tue 4/14/2015 9:38 AM	Attached is a fax received. Regarding ALO 009. It was noted that MH will follow up with a phone call to landowner.	ALO 009
R3-E208	Tue 4/14/2015 9:07 AM	Provided resume. MH recommended signing up on the MH website under "Careers" and provided the link.	
R3-E209	Thu 4/23/2015 1:47 PM	Follow up - requested info regarding route selection process and how it's related to the more eastern options. MH-provided this info including links to website.	MLO 534
R3-E210	Thu 4/23/2015 1:45 PM	Follow up - indicated through a feedback form that you would like to be notified regarding upcoming steps for this project. MH - added to email list. Also provided links to website.	
R3-E211	Thu 4/23/2015 1:44 PM	Follow-up - requested the following from project team; wants to see side-by-side placement of multiple lines and wants notice in early spring before seeding and before access (so he can leave a strip for construction). MH - still collecting info and are in process of determining the final route placement. provided link to sign up for project emails.	
R3-E212	Thu 4/23/2015 1:42 PM	Continuation from R3-E146. MH-Provided link to the library on the website and provided link to project components zip file.	ALO 057
R3-E213	Thu 4/23/2015 8:42 AM	Continuation from R3-E204 - would like to schedule another meeting. MH - would be available the evening of the 28th or 30th. Landowner-30th will work at the same place for 5:30 MH-	ALO 077
R3-E214	Tue 4/21/2015 10:01 AM	requested for landowner to send him some topics they would like to discuss.	ALO 077
R3-E215	Mon 4/20/2015 10:15 AM	Provided a victim impact statement which is attached to the email.	ALO 048 & MLO 369
R3-E216	Fri 4/17/2015 1:54 PM	Follow-up- requested a copy of the landowner form. MH attached it to the email and provided link to website.	
R3-E217	Fri 4/17/2015 1:54 PM	Continuation of R3-E199 - date provided will not work. MH suggested a meeting for either the 28th or 30th. Confirmed that the 28th of April at 11 am works best.	
R3-E218	Thu 4/23/2015 2:01 PM	Follow-up - requested to have email address added to Hydro mailing list. GR-confirmed	
R3-E218	Thu 4/23/2015 2:01 PM	Follow-up - requested "I would like a signed letter from Hydro guaranteeing no ill effect from EMF's. Also don't understand how reliability and cutting trees down (207) is more of an issue than taking people's land (208)" MH-provided links to emf along with other info on website. Provided info on the route selection.	
R3-E219	Thu 4/23/2015 2:01 PM	Follow-up - requested "What makes this the preferred route when majority of the people do not consider this the preferred route? Are you willing to compensate anyone that lives near the preferred route? How about rebates to MB Hydro users from the profit from the export of hydro. Since we will all have to pay for this infrastructure." MH-provided info on route selection process and provided links to website.	
R3-E220	Thu 4/23/2015 1:58 PM	Follow-up - requested "Concrete evidence and research from private groups about ecological impacts for using route 207. Actual cost of using 207 vs. 208" MH-provided info on route selection process and provided links to website	
R3-E221	Thu 4/23/2015 1:57 PM	follow-up - requested "Have more info on how it affects the ecological side of it. why pass 1/2 mile from town instead of 10 miles east because of "wildlife." Know the actual cost difference of both lines." MH - provided info on route selection process and provided links to website.	
R3-E222	Thu 4/23/2015 1:52 PM	Follow-up - requested "Am wondering what the reasons are for not choosing the more eastern route which would affect fewer residential and farming areas." G - provided info on route selection process and provided links to website.	
R3-E223	Thu 4/23/2015 1:52 PM	Follow-up - requested "Why not put line through Crown unpopulated areas instead of populated areas?" MH - provided info on route selection process and provided links to website.	
R3-E224	Thu 4/23/2015 1:51 PM	Follow-up - requested a copy of the LIC questionnaire. MH provided copy	
R3-E225	Thu 4/23/2015 1:51 PM	Follow-up - requested a copy of the LIC questionnaire. MH provided copy	
R3-E226	Thu 4/23/2015 1:49 PM	Follow-up - requested a copy of the LIC questionnaire. MH provided copy	
R3-E227	Thu 4/23/2015 1:49 PM	Follow-up - requested a copy of the LIC questionnaire. MH provided copy	
R3-E228	Thu 4/23/2015 1:47 PM	Follow-up - requested a copy of the LIC questionnaire. MH provided copy	
R3-E229	Fri 4/24/2015 10:12 AM	Follow-up - requested "Where is the draft assessment of the project; it is on the website but not presented or discussed." MH-indicated handouts outlining some of the contents of the EIS were presented in R3 and provided link to website. Provided additional info regarding EIS.	
R3-E230	Fri 4/24/2015 9:56 AM	Follow-up - requested "More construction info, would like to do work for project if needed." MH-provided link to website regarding purchasing with Hydro and provided link about tenders or contracting opportunities.	
R3-E231	Fri 4/24/2015 8:36 AM	Letter and map sent to MLO 0625 on April 24, 2015	
R3-E232	Thu 4/23/2015 4:15 PM	Follow-up-requested "If herbicides are not used on their property, but are on property adjacent, what happens with effects on property? If damage from equipment during construction/maintenance after line is built, who is responsible for repair costs?" MH-Pathways (such as air and water) to receptors (such as a local resident) will be considered with regard to herbicide use. Provided link to ROW maintenance. If any damages are to occur outside of the right-of-way during construction or maintenance, please contact your local district office. Manitoba Hydro (or its contractors) will repair damages that occur on privately owned property.	ALO 032, MLO 177
R3-E233	Thu 4/23/2015 3:54 PM	Follow-up - "Would like to discuss fence placement with Manitoba Hydro." MH-Manitoba Hydro will work with landowners once a Licence decision has been made for the Project. Fencing and other concerns (such as access) will be discussed with a property representative from Manitoba Hydro when discussing easement compensation.	
R3-E234	Thu 4/23/2015 3:43 PM	Follow-up - "Right-of-way appears to go beyond what was previously expropriated/easement." MH-Manitoba Hydro undertakes work within the owned right-of-way or within the boundaries of the easement that is held on the land title. If you believe Manitoba Hydro is undertaking work outside of this right-of-way, I encourage you to contact you district office.	
R3-E235	Fri 4/24/2015 2:24 PM	Follow-up - MH sent a copy of the landowners questionnaire map.	
R3-E236	Fri 4/24/2015 2:12 PM	This letter was sent out to the four recipients April 24, 2015.	
R3-E237	Fri 4/24/2015 2:02 PM	Follow-up - requesting "Dimensions of corner tower structures at base, what is the compensation for corner towers?" MH- provided info and link to landowner compensation brochure.	
R3-E238	Fri 4/24/2015 1:57 PM	Follow-up - requested to be added to the email notification list.	
R3-E239	Fri 4/24/2015 1:54 PM	Follow-up - requesting "At public meeting held at the LaBroquerie Municipal Office on Feb 2, the RM urged MH to consider route 207. We would like to see the feedback you've received in favour of 208." MH-provided info on route selection process and provided links to website.	
R3-E240	Mon 4/27/2015 2:04 PM	Continuation from R3-E214 - MH-thanks for sharing your concerns regarding MMTP. We can discuss these concerns as well as other topics during our upcoming meeting on April 30th at 5:30pm	ALO 077
R3-E241	Tue 4/28/2015 2:24 PM	Follow-up - requesting "Cost between both routes; 207 and 208; impact of the lines of humans, animals, etc. I would like to know which aboriginal claims there are on route #207" MH-provided info regarding route selection/process and provided link to website.	
R3-E242	Tue 4/28/2015 2:23 PM	Follow-up requesting "Just bought property. Dawson & Demeyers right by floodway-concern about future 3 more lines and exactly where they would go? Our house is right on that corner under 1/2 mile to top of floodway. The 4th line would be very close or even on our property." MH-provided map of their property which also shows the MMTP preferred route and ROW. At the moment there are no immediate plans to develop additional transmission lines within this right of way. However, there is room for potentially 3 more lines in this general area. Provided link to website.	
R3-E243	Wed 4/29/2015 8:54 AM	Follow-up - Why are we selling power to the USA for less than it costs MB to make it? 14 c/k to make & selling it for 4 c/k?? Not cool! MH-provided info regarding electrical rates, info regarding exporting including revenue from exporting and provided link to website.	
R3-E244	Wed 4/29/2015 8:49 AM	Continuation from R3-E213 - landowner provided some topics for discussion for the meeting including rural property evaluation, tower spotting, bird surveys, setbacks, buffers around wetlands and riparian areas, human health affects and aesthetics.	ALO 077

Email Information			
AECOM Index #	Date and Time	Email Summary	ALO / MLO #
R3-E245	Thu 4/23/2015 10:20 AM	Follow up items from meeting they had with MAFRD on April 15th, 2015. This email will be attached to the meeting minutes.	
R3-E246	Fri 5/1/2015 3:43 PM	Signed up for the map application but the map section doesn't open up or direct to the map. Turtle Island sustained millions of people for many years, it is possible to live without damaging technology. MH-provided a link to the map application also the link to the mapping in the document library..	
R3-E247	Fri 5/1/2015 3:43 PM	Follow up to a landowner meeting held on April 30. Attached is the map that was discussed with a rough estimate of potential tower placement at 450 m apart. The route the landowner provided will be considered as MH determine the final placement of the T-line. This email is saved with the meeting minutes.	ALO 077
R3-E248	Tue 5/5/2015 8:34 AM	Continuation from R3-E243 - It had nothing to do with your retail sales in MB. When you expect bulk sales to net under 6 cents, why do you build new capacity that costs over 10 cents? Cliches and company slogans may sound cool, to you, but do not answer my initial question. If the correct answer to my question is that this money losing practice is simply following a government directive, why will you not just say so? MH-The short answer to your question is Manitoba Hydro does not sell export power at less than its cost. The prices export customers pay for surplus Manitoba power includes a profit margin for Manitoba Hydro. If Manitoba Hydro does not recover its extra costs of supplying power to export customers plus a profit margin, we do not sell the power. Rates to Manitobans would be significantly higher in the absence of profits from power exports. MH provided additional info about exports.	
R3-E249	Tue 5/5/2015 8:29 AM	I had attended the information session at the holiday inn south a couple months ago and spoke to someone regarding our property. We live at Waverley and According to our land survey, it looked as though the plans for your lines went right through our property. Someone was supposed to get back to us regarding this. MH-Requesting their legal land description; it will help pin point the entire land holding.	
R3-E250	Fri 5/1/2015 4:50 PM	Continuation from email R3-E247 - Landowner thanking MH for the meeting. From the tower placement and the distance from my building site the pink line looks a million times better to me than the blue line. I hope you can work some magic for us man this really gives us some hope so thank you for that. Enjoy the weekend as well and talk to you soon.	ALO 077
R3-E251	Mon 5/4/2015 1:49 PM	Requesting a shapefile on the latest route. MH- provided link to shapefile.	
R3-E252	Mon 5/4/2015 7:42 AM	Were you aware, or have others notified you, that this www.arcgis.com webappviewer is not downloading the interactive map? I had to sign in at this site and create a profile and still no map. I have tried searching, and still no map is found. It is very difficult if not impossible to answer Hydro's questions when the map link they have chosen does not function (i am using an ipad). Please advise how i can access your map so I can answer the questions. MH- provided the updated link.	
R3-E253	Tue 5/5/2015 9:12 AM	I am pleading one more time concerning the hydro line going through my property. I had 40 acres inherited to me by my dad who passed away at an early age when I was only ten months old. My grandson has fallen in love with this property and would one day like to build a house there for himself. Therefore the Manitoba-Minnesota power line going through would only make the land useless. He certainly would not consider building with a line over top of his future house. This power line would be going through the middle of the property. This land is DES NE32 9 7E in the RM of Tache. No one would be interested in buying that property either. So don't take away from me the little that I already have. MH-I would like to indicate to you that this route is not final and we are collecting feedback and documenting concerns to assist in determining the final placement of the transmission line. We will continue collecting feedback and we will determine the final placement of the transmission line this upcoming summer when we file the Environmental Impact Statement with Manitoba Conservation and Water Stewardship. There will also be a public review period where you can share your concerns with both provincial and federal regulators. Provided link to sign up for emails.	
R3-E254	Tue 5/5/2015 1:30 PM	Follow-up items from meeting held with MB Wildlands. Email saved to meeting minutes.	
R3-E255	Tue 4/21/2015 9:50 AM	Scanned copy of a letter from the RM of Springfield.	
R3-E256	Thu 5/7/2015 7:20 AM	He applying for Manitoba Provisional Nominee Program. For applying MPNP, job offer is must to enhance chances of EOI. Please find attached my resume for the subject opportunity. Looking forward to receive your favorable response soon. MH-provided link to submit resume with MH.	
R3-E257	Tue 5/5/2015 3:10 PM	Follow-up letter sent via mail to landowner requesting "more specific location ie. square footage of damage to the forest - I would appreciate being mailed detailed maps of the preferred route that affects my property." MH enclosed a map of the preferred route in relation to landowner and included some additional brochures. We are disappointed and oppose the Proposed MMTP especially of the proposed route which will go through landowners land. Landowner has 300 acres east of Sundown, Manitoba. Landowner had purchased the lands so she can harvest medicinal plants. She is seeking to get support groups to voice their opposition for having the Transmission line going through her land. The full effect of hydro electric on the land is yet to be determined, yet so far people have seen apples by power line grow to be grotesquely big saying it was doubling in size and would not eat them. The natural gift of the medicine plants will be altered and so will the habitat and ecology of the land. The natural life will be angry us for not speaking out. We have natural teachings for harvesting and we talk to plants so that they know what they are ask to help us with. The transmission line is going through Treaty 1 territory. Was Treaty 1 part of the decision? Was cooperation sought? Did Treaty 1 respond as part of the negotiations. In many case consultation means being asked for our input only to be told they going ahead anyways so why ask us. In our Treaty 1 understanding we did not give the resources. We shall be part of the official statement for the decision of the route. Another Person - thanking for letter concerning MMTP. He agrees and supports this defense and her right to object to any such project crossing her land. Such objections should be taken into consideration before any decisions are made regarding this project.	
R3-E258	Wed 5/6/2015 2:59 PM	Continuation from R3-E248 - Why did the NFAT not consider buying US power in dry years? It is lowest in capital and risk in today's low cost energy regime. MH-Manitoba Hydro already plans on buying power from the US in a dry (drought) year. All of the potential development plans considered by Manitoba Hydro in the recent Need for and Alternatives To (NFAT) process included significant quantities of imports energy during a drought. Manitoba Hydro anticipates that in a severe drought about 10% of the Manitoba load would be served by imports. The quantity of imports that Manitoba Hydro can utilize is limited by the import transmission capacity.	ALO 134
R3-E259	Thu 5/7/2015 2:14 PM	Part of R3-E258 - MH-Thank you for taking the time to share your concerns regarding the landowner both in person and through this email. I would like to indicate to you that this route is not final. We are collecting feedback from a variety of interested parties including First Nations Communities, Metis, landowners, the public as well collecting information from the environmental assessment work being undertaken to determine the final placement of the transmission line. We will continue collecting feedback and we will present the proposed final placement of the transmission line this upcoming summer when we file the Environmental Impact Statement with Manitoba Conservation and Water Stewardship. We encourage any interested individual to sign up for project email notifications on the project website (www.hydro.mb.ca/mmt) to be informed of upcoming steps in the regulatory review process. In addition, as part of our community engagement process, Manitoba Hydro continues to share information with Treaty One First Nations, other interested First Nations and Aboriginal Organizations. Landowner has shared additional information with our team and we welcome any additional information she or yourself would like to provide.	ALO 134
R3-E260	Fri 5/8/2015 11:52 AM	Requested for MH to send a map of the current preferred route for MMTP (attached to email). Provided link to website for additional project information.	
R3-E261	Fri 5/8/2015 10:33 AM	The neighbourhood association for the Turnbull Drive-Red River Drive area (768 Association Inc) met last week for their Annual General Meeting. At the meeting, a concern was brought forward that I'm hoping you can shed some light on. "Are you aware of where the placement of the tower will be between Highway 75 and St. Mary's road?" Our concern is that if a tower is placed between the dike and Courchane road, that it could hamper the ability of the Association to raise the level of the dike in a flood situation. In order to raise the dike, we would need to widen the base of the dike and it would not be wise to have to add earth under a hydro tower. If you aren't aware of the where the tower will be placed, is there some way for you to find out this information? MH-final tower placement has not been determined and will not be determined until preliminary survey work is undertaken. Determination of tower placement may not occur until after a Licence has been received for the project which is anticipated in 2017. We are in continued discussions with Manitoba Infrastructure and Transportation regarding flood prevention and tower placement. As these are continued discussions, no final decision has been made regarding tower locations. I have attached a map of the area mentioned below. Tower spacing is estimated at 450m apart on average. If there are areas of higher concern please feel free to mark up the map and return it for our consideration.	
R3-E262	Mon 5/11/2015 1:58 PM	Follow-up requesting "Property owner has mineral rights to the property and has concern regarding what happens to those mineral rights." MH-Manitoba Hydro will discuss compensation with each affected landowner along the final preferred route. Certain circumstances, such as mineral deposits, will be discussed but will be dependent on final placement of the line, tower placement, and the value and abundance of the deposit. Each scenario varies and Manitoba Hydro will undertake this discussion with you during compensation discussions that are likely to occur following a Licence decision. Provided link to website and phone number.	
R3-E263	Mon 5/11/2015 12:38 PM	Follow-up requesting "Wants to know if herbicide could potentially affect well water quality?" MH- Water Quality will be reviewed as part of the environmental impact statement (EIS) that is being developed for the Project and only draft assessment results are available at this time. Active & artisanal wells have been identified and mitigation measures will be in place to minimize potential effects to well water quality if any potential effect are anticipated. The EIS is anticipated to be filed this summer with both provincial and federal regulators. With the filing a public review period will begin and any member of the public can comment on the EIS. Provided link to website and phone number.	
R3-E264	Mon 5/11/2015 12:23 PM	Another recipient replies to initial email R3-E258. To be coded as R3-E258	ALO 134
R3-E265	Tue 5/12/2015 9:54 AM	I am attaching a picture of the land survey we have. Is this what you need? MH-The resolution on the photograph is quite low and I am having difficulty reading the information. If you could resend at a higher resolution (the email size will be much larger) it would be beneficial. We also have a webviewer similar to google earth that you could review and find your property on also. You can review the map viewer using this link http://www.arcgis.com/apps/webappviewer/index.html?id=2e9a7363a45f42a19d9c7c1ceaa348de Feel free to contact us directly also if that is preferred.	
R3-E266	Tue 5/12/2015 8:34 AM	Continuation from R3-E262- Thanks for your reply and information. I'll pass that information along to the members of the 768 Association. If we have any further questions, we will definitely be in touch.	
R3-E267	Mon 5/11/2015 8:16 PM	Continuation from R3-E266-provided a better quality image. MH will request MH property department to look into your property and will get back to you soon. (Image saved in 403-02-04-R3Letters&Other Info)	
R3-E268	Wed 5/13/2015 2:32 PM	Continuation from R3-E265- recipient thanking MH.	
R3-E269	Tue 5/12/2015 2:42 PM	Please share these two attachments with all the decision-makers. Provided a letter regarding: I would like you to see it because it shows so well what a difference it will make for me if the transmission line runs along the WEST rather than the east side of the current line when it crosses my property. All the negative impacts of the line will be somewhat mitigated by moving it to the west: enjoyment of wildlife and wild plants, noise from the line, privacy, pacemaker, protecting firewood, protection from weather, food gathering, children building homes, property value. Also included map of property. (Info saved in 403-02-04-R3 Route Modifications)	ALO 134
R3-E270	Thu 5/14/2015 8:53 AM		ALO 074, ALO 086

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P001	1/26/2015	Caller called regarding precieved decrease in property values due to transmission lines in close proximity to his property. He was looking for literature or any studies that have been done regarding proerty values and new transmission lines. The Manitoba Hydro representative indicated that studies are currently being done for the MMTP and that information will be available in the EIS once it is submitted to the regulators. The Manitoba Hdyro representative also indicated there were studies completed for the
R3-P002	1/20/2015	Caller has recently (August 2014) acquired property within one mile of the preferred route ("QS specified"), just north of the Cottonwood golf course near highway #1). He called to ask if the previous owner was notified of the project. The MH representative indicated that a letter had been sent to the previous owner.
R3-P003	1/20/2015	Caller called back this morning and indicated he is an affected land owner. He owns 50 acres on the northern portion of "QS Specified". as he is just hearing about the project he had questions regarding EMF. The Manitoba Hydro representative indicated that Manitoba Hydro follows all legal limits on emitting EMF and also indicated that there is further information on EMF on the Manitoba Hydro website from the World Health Organization and Health Canada. Caller also asked about the compensation policy. Manitoba Hydro representative indicated that they typically go through an easement process in which the landowner would recieve 150% of marketvalue for the land as well as compensation for any damage during construction. Caller asked how Manitoba Hydro determines the market value. The Manitoba Hydro representative indicated that they use the assessed value as well as current sales in the area of similar property. If this is not sufficient for the land owner Manitoba Hydro can also pursue land value certification through the Land Value Appraisal Commission of Manitoba. Caller also enquired about tower placement. The Manitoba Hydro representative
R3-P004	1/20/2015	Caller called to let Manitoba Hydro know they no longer own they property that is within a mile of the preferred route. they sold the property to a landowner in 2012.
R3-P005	1/20/2015	Caller called to let Manitoba Hydro know there is a cell tower close to the line just north east of the floodway gates. He is concerned that the preferred route is too close to the tower. The Manitoba Hydro representative indicated that the preferred route is close to 2000 feet away from the cell tower which is well away from the legal proximity.
R3-P006	1/20/2015	Caller called regarding his property which is approximately 500 metres from the preferred route near Beaudry Provincial Park. He is concerned that the line is too close to his home, concern regarding noise of the line, how it will affect property values and potential future development. the Manitoba Hydro employee informed him of the LICs
R3-P007	1/20/2015	Caller called to enquire about the preferred route crossing his property. He is unable to attend the open houses and land owner information centres and asked that we come to his home to discuss the project. The Manitoba Hydro representative indcated this would be fine and will set up an appointment. He is concerned about hunter and public access to his land as he already has issues with this without a transmission line right of way. He would also like information regarding a contact in distribution at
R3-P008	1/21/2015	Caller called to enquire about how much of the preferred route is on Crown land versus how much is on private land. He also indicated that he would prefer this communication to be via hard copy in the mail. the Manitoba Hydro representative indicated that they would find this information and sen to his address provided
R3-P009	1/20/2015	Caller called expressing that he is happy the route is no longer on his property but he will be working with newly affected landowners. We discussed route decision making processes, the Open house schedule, modifications that occured based on public feedback from R2. He requested 15 copies of the following material which was picked up 01/20: newsletter, route selection, EMF brochure, business card, individual maps from PTH1 to D602F (Anola) to give out to landowners.
R3-P010	1/16/2015	Caller was having an issue with the map on the website. I outlined that we made the modification that he requested during Round 2 (move the line to the eastern edge of his proeprty). I developed a map and emailed it to the caller on January 16th @ 430pm. He requested that as we move forward he would like someone to come stake the
R3-P011	1/15/2015	Wanted to know whether MMTP would be crossing his property as he is building a chicken barn. I indicated that there is no restrictions of building on his property as long as it is not within the ROW for the Transmission Line (both R49R and MMTP). I indicated he should contact his local office for further details as R49R will be in proximity but not MMTP ("QS specified")
R3-P012	1/13/2015	Received Email about the scoping document and wanted it explained to him as to how the process works. Also outlined that a preferred route would announced in the near
R3-P013	1/22/2015	Wanted to understand the timelines for the project and when construction is anticipated. Indicated that construction would occur after an Env. Act licence is received and
R3-P014	1/13/2015	wanted to discuss the scoping document and what it means and how does he participate. I indicated that his concerns with Quarries will be addressed in the EIS and that it was considered as we move forward with a preferred route. I noted that the PR would be released in the near future. Outlined that the scoping document is the blueprint for
R3-P015	1/22/2015	Called to ensure they received our notification. Left a message and discussed the project with an individual about process and indicated we are willing to meet with the colony prior to the Piney open house if they would like. Discussed why 2 miles east is not viable (Proposed Ecological Reserve). Concerned with proximity to the yard. Caller MLO[261]
R3-P016	1/23/2015	wanted to know why he is getting the package. Noted he was a mile away. He said he would attend the Richer open house. outlined that MMTP will follow the existing transmission line that follows Cottonwood golf course. Discussed difference between PR and FPR and when we intend to file the EIS.
R3-P017	1/21/2015	Called regarding "QS Specified". Would prfer to see the towers in the same line as current towers on the property. He also sold ROW to Manitoba Hydro in 1977 with agreement that he could continue to fram the land free of charge. Wanted to know if this would still be the case if he sold the land. The Manitoba Hydro preresentative indicated that clause 9 in his contract indicated that if he sold the property the new owner would not be able to farm the land for free but would have to pay the cost to lease
R3-P018	1/27/2015	Caller is an affected landowner at "QS specified". the line runw diagonally through his section and is approximately 500 metres from his house. He believes this is till way too close to his home and he also has a cattle operation on the property. He booked a meeting during the Zhoda open house on feb. 10 at 5:30 to speak with a Manitoba
R3-P019	1/22/2015	Caller lives on the north side of the floodway and was notified as a land owner who is within one mile of the preferred route which is on the south side of the floodway. He called to say he had concerns regarding EMF. the Manitoba Hydro representative guided him to the literature available on the Manitoba Hydro website.
R3-P020	1/27/2015	Caller called regarding the community development initiative for Bipole III. He finds it odd and unnecessary and does not believe a community such as the City of Steinbach needs funding from Manitoba Hydro. He belevies that money should be distributed to the affected landowners. the Manitoba Hydro representative indicated that the affected landowners already recieve compensation from Manitoba Hydro and also relayed the purpose of the community development initiative which will provide an annual
R3-P021	1/27/2015	Considering buying section "QS Specified" which has a Manitoba Hydro owned right of way near Anola. Called to enquire what is in the right of way. the Manitoba Hydro representative indicated there is curently one transmission line in the right of way with the potential to build 3 more lines in that right of way.
R3-P022	1/22/2015	Manitoba Hydro representative called caller who is an affected landowner adjacent to the glenboro station to let her know Manitoba hydro is moving into Round 3 of public
R3-P023	1/20/2015	Manitoba Hydro representative called to inform Enbridge that we are moving into Round 3 of public engagement and there are no changes to the Gelnboro Station project.
R3-P024	1/20/2015	Enbridge indicated they now have a new contact. the Manitoba Hydro representative indicated they would forward materials on the project to the new contact via email.
R3-P025	1/27/2015	A Manitoba Hydro representative left a message for landowner to let him know we are moving into round 3 of public engagement, however there are no changes to the
R3-P026	1/27/2015	A Manitoba Hydro representative left a message for landowner to inform them that we are moving into round 3 of public engagement for MMTP and there are no changes
R3-P027	1/26/2015	Caller called regarding his section "QS Specified". He is an affected landowner. He is upset because he is currently rehabilitating his property from farmland to its natural state. He uses the land for recreation and wildlife and vegetation interests. Concerned about the public accessing his land via a right of way. The Manitoba Hydro representative indicated they will call back and make a phone appointment to review the landowner information sheet as Caller currently lives in Edmonton and will not be
R3-P028	1/27/2015	Caller called to enquire why there were no oopen houses in Winnipeg for MMTP Round 3. the Manitoba Hydro representative called back and left a message indicating
R3-P029	1/27/2015	Caller called regrading the affected sections owned by HyLife; "QS Specified". His 3 main concerns are Bio-security on their hog operation. The Manitoba Hydro representative indicated they will bring the Manitoba hydro bio-security policy to their face to face meeting for further discussion; "QS Specified" is where their cattle ranch is located. the preferred route is right over top of their calving ridge. this area is extremely sensitive and they would prefer to see the line not cross the ridge. the Manitoba Hydro representative indicated they would bring some maps to their face to face meeting to discuss potential mitigation opportunities to avoid the ridge. The third concern is
R3-P030	1/26/2015	Wanted to know the crown vs. Private for the PR. Indicated that 33% is owned/eased by MH, 25% crown and 42% private. He also requested 4 additional E sized overview maps (he picked up 01/27). Wanted to know if R49R and parelleling the line meant MH did not need additional easements. Indicated that the easement would be just for
R3-P031	1/21/2015	Discussed the preferred route and how the preferred route is now paralleling R49R on the east side as opposed to the west side. Caller is very unhappy with the alignment as it is brought closer to her home. She is concerned about EMF. Visually she is not concerned. Outlined that she should come to an open house/LIC to complete a landowner survey and contact Manitoba Hydro representative to set up a time to discuss with an MH Rep. She provided 2 modifications in her area. Will submit changes in an email to MMTP regarding her modification preferences. Indicated that her preference is to have it back on the west side or to cross over the line to maximize separation
R3-P032	1/27/2015	Lives on Fraser Road, north side of the floodway. Has no major concerns and will attend the open house in Winnipeg.
R3-P033	1/27/2015	Caller called to inform Manitoba Hydro that he is opposed to MMTP and does not think Manitoba Hydro should be exporting power to the United States. He also does not agree with the rate increases for Manitobans and believes the PUB should not approve anymore rate increases for Manitobans. He does not believe the export line is
R3-P034	1/28/2015	Caller called regarding precieved decreases in property values due to new transmission lines within close proximity to private property. He was looking for information on previous studies. The Manitoba Hydro representative indicated that he could review the information that was presented in the Bipole III EIS which is available on the Manitoba Hdyro website. There is also a document on the MMTP project website that discusses the studies that will be completed for the MMTP EIS relating to property
R3-P035	1/29/2015	Caller called regarding 3 properties her and a landowner own. Two properties are within one mile of the preferred route and the property of most concern is "QS Specified", which already has a 230kv line and the preferred route would see the 500kv line run adjacent to the 230kv line which is already crossing their property. They feel this is way Resident from sage Creek called to ask if MMTP would be replacing the St. Vital Letellier line. the Manitoba Hydro representative indicated that MMTP will not replace St. Vital Letellier which is a smaller 230kv line being built for domestic purposes in southern Manitoba while MMTP is a larger 500kv transmission line being built for export
R3-P036	1/29/2015	Caller called to book a meeting at a MMTP LIC for Feb 18th at 5pm. He is located at SW "QS Specified" near the La Verendrye golf course. He indicated he was planning on buidling his home along the river where the preferreds route is and feels extremely upset about this as he recently pruchased the property to do this.
R3-P037	1/29/2015	TCPL representatives called to ask for mapping information to determine if MMTP will cross TCPL. Caller indicated he would send an email to the MMTP email address to
R3-P038	1/30/2015	Caller called to get more information regarding MMTP. The Manitoba Hydro representative indicated that the property ("QS Specified") is close to a mile away from the preferred route and the only real impact would be view shed and perhaps a very short closure to Highway #1. the Manitoba Hydro representative indicated they would put
R3-P039	1/28/2015	Discussed the difference between a preferred route and the process to determine the final placement of the route. He has scheduled some time with us in Zhoda to discuss further. He indicated it was too close to his residence and that we should try and move the route more NE from current alignment to maximize separation.
R3-P040	1/29/2015	Wanted contact information for a landowner in his constituency to contact Manitoba Hydro representative directly to discuss.
R3-P041	2/2/2015	ALO[080] Wanted to know what the venues would consist of to share feedback. Indicated they came and shared their preference for the eastern route further from La Broquerie. Indicated we are trying to finalize the placement of the transmission line. He is heading on vacation and did not want to set up an appt at this time but will attend
R3-P042	2/3/2015	Concern regarding width of ROW and compensation, uses property for recreational activities. Booked LIC meeting for Feb. 24th
R3-P043	2/4/2015	ALO [138] suggested a route modification which was sent by email for confirmation on 02/04 at 12:15

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P044	2/5/2015	Caller called regarding viewshed from his home looking onto the floodway and the south berm where the preferred route would be located if the project is approved. He would prefer to see the route go 3km further south so it would not impact his view. he lives at Fraser Road.also booked a meeting on March 5th at the Oakbluff open house
R3-P045	2/5/2015	Called regarding proximity of line to the school in La Broquerie. the Manitoba Hydro representative indicated the preferred route is approximately 1.6 km from the school.
R3-P046	2/6/2015	Caller indicated that seemed like a pretty good distance from the school and booked an appointment at one of the Land Owner Centres. Called to book a landowner meeting at the Wpg Open House on Feb 12 at 3pm.
R3-P047	2/13/2015	displeased with the project. Indicated poor notification processes as this is the first time he has heard about the project. concerns regarding EMF, viewshed, property value. would like to see the south loop moved to the northern side of the city where there are already numerous transmission lines. He feels the system is reliable enough as he has lived in St. Vital for 30 years and never had any reliability issues. therefore, feels there is no need for the south loop corridor. Although he understand that people north
R3-P048	2/17/2015	Called to book a one on one landowner meeting in La Broquerie on Feb. 18th. did not have his mlo/alo number but will bring it to the meeting.
R3-P049	2/18/2015	called to book a one on one LIC meeting for Feb. 28th
R3-P050	2/18/2015	*QS Specified* is affected in the NE corner of the property, has plans for future subdivisions, made an appt for a one on one LIC meeting on Feb 26 in Ste. Anne
R3-P051	2/17/2015	Called to enquire how close the MMTP Preferred Route is to Richer, MB. The Manitoba Hydro representative indicated the preferred route is approximately 2.3km west of
R3-P052	2/18/2015	called regarding sections *QS specified*. Family owns the above 1/4 sections. Made an appointment to come to an LIC and speak to a Manitoba Hydro representative directly
R3-P053	2/24/2015	purchased land in Jan of 2014. Preferred route goes across his property but was not notified as the letter was sent to previous owner. Booked a meeting at the LIC in La Broquerie on Saturday, February 21.
R3-P054	2/19/2015	Called to book an LIC meeting for himself as well as his neighbor who both live on Quintreau Road near La Broquerie
R3-P055	2/20/2015	Called to enquire about the project, Manitoba Hydro representative gave an overview of the project and indicated Caller should attend the open house in Headingly as this would be the closest venue to his home. Caller indicated he would attend the open house in Headingly.
R3-P056	2/19/2015	Called to book an LIC appointment in La Broquerie on Saturday Feb 21
R3-P057	2/23/2015	Called because she was unable to make it to an open house during round 3. Asked how close the line was to the floodway. The Manitoba Hydro representative indicated that the preferred route is just south of the floodway gates. The land owner asked about property values. The Manitoba Hydro representative indicated they are
R3-P058	2/25/2015	Caller called to inform Manitoba Hydro he is very unhappy with the placed of the preferred route which is approximately 115 metres from his home. There are already 2 other transmission lines in that right of way which he stares at out his front window. He has concerns regarding viewshed, property value, health concerns and noise concerns. the Manitoba Hydro representative indicated they have noted his concerns and all information gathered through the public engagement process will de
R3-P059	2/23/2015	Caller called because she was having difficulty printing a map from the project website. The Manitoba Hydro representative indicated that they could send a pdf of the
R3-P060	2/24/2015	Called to book a meeting at an LIC on February 26 at 4:30 pm
R3-P061	2/13/2015	Left Message Feb 3rd to schedule a meeting to discuss the preferred route.
R3-P062	2/17/2015	Set up a meeting for 1pm on February 23rd
R3-P063	2/25/2015	Called the individual to get more information regarding the internal defibrillator which was brought to our attention at the La Broquerie Open House.
R3-P064	2/8/2015	Wanted to know when he would receive his notes from the meeting that was held January 29th at his home. Also discussed 207 vs. 208.
R3-P065	2/19/2015	Wanted to know the status of the meeting notes. Meeting notes were sent by email by MH on February 25.
R3-P066	2/25/2015	Purchased *QS Specified* in January 2015 and was not aware the preferred route crosses the property. called to enquire if Manitoba Hydro had notified the previous owner. Manitoba Hydro indicated they would have done a broad notification in the area that the proposed project may be routed in the area. However as this segment was
R3-P067	2/26/2015	Within one mile of the preferred route on symington Road. called to make an LIC appointment on Sat Feb. 28th at Ste. Anne.
R3-P068	3/3/2015	Caller called, recently bought property on the preferred route and was unaware of the project. Concern regarding property value, viewshed and EMF. Has been given a rough estimate on the potential easement compensation for his property and has requested a more exact dollar amount on the potential easement on the property if the
R3-P069	3/4/2015	spoke to caller on the phone regarding RoW clearing and compensation.
R3-P070	3/4/2015	Manitoba Hydro representative spoke to landowner. she indicated she was familiar with the project and would call the 1-800 number the Manitoba Hydro representative
R3-P071	3/4/2015	The Manitoba Hydro Representative spoke to landowner regarding their property which is 40 acres on the south east side of the 1/4 section (*QS Specified*). They had plans to build their home in the meadow area where the bush and shed are now on the east side of the current 230kv line which would be only 50m from the preferred
R3-P072	3/4/2015	Caller who resides on Scotland Avenue in winnipeg called because she is against both BiPole III and MMTP. She believes the costs are too high and she does not believe Manitoba Hydro should be stealing land out from underneath hardworking farmers. She is unable to attend any open houses and therefore would like her information
R3-P073	3/4/2015	Manitoba Hydro representatives have talked to the landowner previously. Discussed that the line would be approximately a 16 acre easement. He just purchased the land and was unaware of the potential project. Indicated that they were not notified due to our team pulling tax roll and the lag between purchases. They purchased the property for privacy and with a marsh for wildlife. They intend to build a home facing southwest which would face the transmission line. Walked through the regulatory process and
R3-P074	3/4/2015	Wanted to know when the route would be deemed final and wanted to know about the compensation package. He has had talks with MHHC regarding his property and would be willing to donate the land to them as he has no children. If it were to go on his property he would want assurance and assistance from MH that access would be
R3-P075	3/5/2015	Manitoba Hydro representative called to enquire if landowner was familiar with the project and knew the preferred route was going across her property. she indicated she was familiar with the project and that her son went to the Open House in La Broquerie to represent her.
R3-P076	3/10/2015	Manitoba Hydro representative called landowner to inquire if she was aware of the project and the potential of the preferred route being on her property. she indicated that yes she was very familiar with the project and upset that the project was on her property as the line will go across an area her son had planned on building his home on. she has concerns regarding insurance, property value, EMF, access management. Landowner indicated that if the preferred route were going to be on her property she would
R3-P077	3/9/2015	Manitoba Hydro representative called landowner [ALO 132] to enquire if he was familiar with the project and the potential for the preferred route to cross his property. He
R3-P078	3/9/2015	Manitoba Hydro representative called landowner [ALO 104] to enquire if he was familiar with the project and that the preferred route may cross his property. Landowner
R3-P079	3/9/2015	Manitoba Hydro representative called to enquire if landowner [ALO 098] was familiar with the project and aware that the preferred route may be impacting her property. Landowner indicated she was aware of the project and had met with Manitoba Hydro in Zhoda at the Open House to discuss the project.
R3-P080	3/10/2015	Manitoba Hydro representative called to enquire if landowner [ALO 096] was familiar with the project and that the preferred route may impact his property. Landowner indicated he was familiar with the project and that he will be attending the Open House in Richer on March 11.
R3-P081	3/9/2015	Manitoba Hydro representative called Landowner [ALO 090] to enquire if he was familiar with the project and the potential for the preferred route to impact his property. Landowner indicated he was familiar with the project and that he will attend the Open House in Richer on March 11.
R3-P082	3/9/2015	Manitoba hydro representative called to enquire if landowner [ALO 089] is familiar with the project and if she was aware the preferred route may impact her property. Landowner indicated she was familiar with the project and that her main concern was access management. The Manitoba Hydro representative indicated that if a license
R3-P083	3/9/2015	Manitoba hydro representative called to enquire if landowner was familiar with the project and knew there was a potential for the preferred route to impact her property. Landowner indicated that she informed and had no major concerns regarding the preferred route crossing her property.
R3-P084	3/10/2015	Manitoba Hydro representative called the landowners [ALO 066] to enquire about their concerns regarding the project. Landowner indicated she had numerous concerns including EMF, property value, potential subdivision plans and general safety of children and livestock around the towers.
R3-P085	3/9/2015	Landowner [ALO 135] called to follow up on the registered letter she received regarding the project and the potential for the preferred route to cross her property. she indicated she will come to the Open House in Dugald on March 12th to review the map of her property with a Manitoba Hydro representative.
R3-P086	3/11/2015	Manitoba Hydro representative called landowner [ALO 036] to inquire if he was familiar with the project. Landowner indicated he was familiar with the project and attended
R3-P087	3/11/2015	Manitoba Hydro representative called landowner [ALO 064] to enquire if he was familiar with the project. He indicated he was familiar with the project and had concerns
R3-P088	3/11/2015	Manitoba Hydro representative called landowner [ALO 060] to enquire if he was familiar with the project,. He indicated he was familiar with the project and had no objections to the project but did have questions regarding compensation, tower size and RoW clearing. The Manitoba Hydro representative answered his questions.
R3-P089	3/11/2015	Manitoba Hydro representative called landowner [ALO 055] to enquire if she was familiar with the project. Landowner indicated she was familiar with the project and aware the preferred route may cross her property. She has concerns regarding property value, EMF and safety for children and livestock around the towers.
R3-P090	3/11/2015	Manitoba Hydro Representative contacted landowner [ALO 099] to see if he had received a letter from Manitoba Hydro regarding the project. Landowner indicated he had received the letter in the mail and also indicated he would be attending the Open House in Richer on March 11th.
R3-P091	3/12/2015	the Manitoba Hydro representative called the landowner residence the day before and spoke to landowner's wife, she indicated he would call back with further information regarding their property and the potential mitigation opportunities for the project. Landowner indicated he is very displeased with the potential for the project to cross his property. He sees the process as very unfair, concerned about property value, EMF, safety around the lines, access management, size of towers. Indicated the best tower
R3-P092	3/17/2015	Manitoba hydro representative contacted to landowner to enquire if he was familiar with the project. he indicated he was familiar with the project and also indicated he had concerns including, property value, feels the compensation package is too low, concerns with access management.
R3-P093	3/17/2015	Manitoba Hydro representative called landowner twice but there was no answer or answering machine. Manitoba Hydro also has record of landowner attending and open

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P094	3/18/2015	<p>Bus & Ind KPI's - Motel 6 Headingley # rooms – 70 Occupancy Rates – Winter 60%, Summer (March to Sept/Oct) is approximately 90-95%</p> <p>1)No 2)Won't impact us 3)No, it's going through anyways 4)Neither here nor there 5)No 6)– 7)No 8)No other than perimeter expansion that's been going on for the last few years 9)– 10)– 11)– 12)– 13)No 14)Not sure, not sure what's involved, if re-routing traffic then yes. 15)Yes, first come first serve for who gets rooms. We have a very busy construction season. 16)– 17)– 18)No 19)No, call anytime 20)Absolutely, go ahead</p>
R3-P095	3/17/2015	<p>ENVIRONMENTALISTS - RIVERS WEST RM of Ritchot only area she sees would be impacted for Rivers West. Her mandate is Emerson to Lake Winnipeg along the Red River. 1)Most communities have the NIMBY effect. Her biggest concern is the negative environmental impacts on areas where the Transmission line is going. Looks like they've tried to avoid land where there is development and are mostly on agricultural land. 2)Positives – job creation, innovation, positive impacts to the Manitoban economy of selling hydro to the U.S. -> positives are all on the economic level. 3)No, as long as don't transmit emulsions of gas that impacts people's health (she was under the impression it was all underground. When she realized it was above ground she got worried about transmission of something... maybe EMF?) 4)Agricultural and light industrial 5)Not us 6)Recreational stuff we do is along the Red River Corridor, only is the floodway between Grand Pointe and La Salle. Assuming would go around the floodway because can't see them building on floodway. Fishing and other activities on the Red River. Where the TL would go is not a popular area for boating/fishing activities. 7)No 8)Aesthetic concerns, that may decrease property values 9)Only access point along Red River, north of St. Adolphe 10)There may be, some people will be against the project. Projects of this magnitude will be controversial no matter what. Manitoba Hydro is smart to do public consultation and interviews in advance to avoid problems in the future. 11) Some increase in traffic from construction, same as any project. Not a huge impact on our area (Rivers West Area) 12)No 13)Red River is a tributary to Lake Winnipeg. Natural environment is important. Important features include water quality, wetlands, green spaces and river bank stabilization is all important to us. If working near tributaries to the Red River, (Ex: Rat River), they need to be cognizant of maintaining integrity of river bank stabilization. If can create wetlands that would be good. 14)– 15)RM of Ritchot – Grand Pointe area – housing development. Sure the TL will be an issue for the RM of Ritchot but up to their council to talk to MB Hydro about that. Also CentrePort, housing developments in west side of Winnipeg. Hydro needs to make sure there is no negative impacts on other projects from this development.</p>
R3-P096	3/18/2015	<p>Caller lives on Fraser Rd, north side of the floodway. Called reagrding EMF concerns. Manitoba Hydro representative informed caller of the information Manitoba Hydro</p>
R3-P097	3/13/2015	<p>Manitoba Hdyro representative contacted the landowners to see if they had received the Project notification letter from Manitoba Hydro in January. Landowner [ALO 042] indicated they had received the notification and had no major concerns other than wanting to keep the lumber that is cleared from the RoW and also wanted to inform</p>
R3-P098	3/13/2015	<p>The Manitoba Hydro representative contacted the property owners to enquire if they received a package from Manitoba Hydro regarding the project. Landowner [ALO 039] indicated they did receive a package and were familiar with the project. She indicated she had concerns regarding EMF. the Manitoba Hydro representative sent landowner</p>
R3-P099	3/17/2015	<p>Land owner called to enquire about the project which is approximately 800 metres from his home. concern regarding veiwshed, property value and EMF</p>
R3-P100	3/18/2015	<p>Manitoba Hydro representative called landowner [ALO 017] to enquire if they had received a letter regarding the potential impact of the project on their property. she indicated they had received the package and has concerns regarding property value, EMF and compensation.</p>
R3-P101	3/18/2015	<p>Called to request an MLO package from Manitoba Hydro. the Manitoba Hydro representative indcated she did not originally receive an MLO package because her home is further than one mile from the preferred route; however Manitoba Hydro would be happy to send her a package.</p>
R3-P102	3/18/2015	<p>Manitoba Hydro representative contacted the landowner [ALO 010] to determine whether they had received a package in the mail indicating a potential impact to their property regarding the project. Landowner indicated that yes they received the package and understood the potential effect of the project on their property. He enquired</p>
R3-P103	3/23/2015	<p>Landowner (MLO 856) lives on Fraser Road near the floodway and called to indicate she has concerns regardng EMF and viewshed and is against the project.</p>
R3-P104	3/26/2015	<p>Caller has property west of Piney and was unable to attend any of the open houses and called to enquire if his land was going to be affected by the preferred route. the Manitoba Hydro representative indicated that his land was not affected. Caller then indicated he had no further concerns regarding the project.</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P105	1/8/2015	<p>Resource/industry Business Group – B. Vermette Backhoe Service Ltd. Notes/ Key Discussion: •Job creation; positive effects for the economy, supports the project Issues/Interests/Questions Raised: Q1 – No Q2- Yes, the Project will create positive benefits to people (e.g. create temporary and some permanent jobs) Q3- no health concerns Q4-the project will likely go through some farmland/marginal land in the St' Anne area – some people may be upset Q5- yes, where it is going north and up Q6- No plans to expand business Q7-No, not aware of any other development projects going through and EAC application or already approved Q8- The economy around St' Anne is fairly stable; the project would likely make more jobs and is positive (jobs related to upgrading roads, graveling, excavating etc.) Q9-No Q10 A)- No; B) - jobs have increased in the past 5 years; C) – Yes Q11 –The project may use some local suppliers and will therefore effect the local economy e.g. use local equipment suppliers, gravel etc. Q12 – people commute to their work local, from nearby communities and other cities in the area Q13- past projects have created positive impacts; B) N/A Q14) No concerns about construction, operation, maintenance Q15- No, other projects are proposed, but there is a proposed pipeline and if it goes through then it would affect the industry Q16- the proposed pipeline would be new infrastructure in the Project area Q17 – N/A Q18 – Yes there is sufficient capacity Q19 – None Q20 – No Q21- No Q22- No Q23 – No Q24- Yes</p> <p>Overall, finale comments: It is a positive think, goof for the province/no issues with it (verbal consent given over the phone to follow-up/use info in the EAC)</p>
R3-P106	1/13/2015	<p>Notes/ Key Discussion: •Bear outfitter, discussed bear hunting, baits, impacts of TL's on his outfitting, positive economic benefits to the province (hoped for anyway, does not want us to end up subsidizing this line for the US), best land use for TL is higher ground to not affect bogs •Feels that there will be impacts on personal appreciation of the area by certain users, some positive and some negative •Increased consequences to TL will be on wildlife and especially on the ATV side of things, some riders don't care what the terrain looks like after they've gone through. 1 or 2 might not make a difference but many will have effects on the bogs. Issues/Interests/Questions Raised: •Concerned about maintenance operations since the line is in close proximity to his line (200m in some cases), concerned that maintenance might be carried out when using a bear bait with clients out •Concerns on bear population – during construction, will dens be damaged? KPI Questions 1.Yes, TL will run within 200m of 6 bear baits that have been established for 15+ years. Concern – deal with non-resident hunters (US & all over the world) who want to see the wild. Structures will impact look and feel of hunt. Not sure what impact the line will have on bear population during construction. Will dens be damaged? Last summer worked on a project with hydro monitoring his 6 bait sites and 6 additional bait sites to get better feeling of bear population 2.Hope there will be positives with Manitoba getting paid for resources and enough money charged for utility that we (Manitobans) make money for this line. Positive impact on economy and jobs. Want to subsidize utility later on. 3.No 4.Areas with higher ground to not affect bog. 5.No 6.Ecological reserves that will be close to Transmission line 7.– 8.No, nothing at this point 9.Yes, will impact certain users. Some positive, some negative. (Positive examples are for ATV's and snow machines) 10.Construction – no impact 11.Yes 12.Yes, on wildlife and especially on ATV side of things. Some of these riders don't care what terrain looks like after they've gone through. 1 or 2 may not make a difference,</p>
R3-P107	1/14/2015	<p>Notes/ Key Discussion: •Recreational and Aesthetic effects of the TL on the golf course, Access issues •Concerned with proximity to the golf course and perception of health concerns issues related with the close proximity of a TL to the golf course •Thinks best land use is farming, TL's are an eye sore, so anywhere with little population around •A TL will affect future initiatives by Golf Course, they were planning on expanding land for extra golf course (greens?) which would be even closer proximity and eyesight to the TL •Concerned that tourism will be affected. "One thing going for us is we are surrounded by nature", the TL will be an eyesore and will affect the golf course (tourism), has tourists coming from across Canada and internationally to golf, is worried that the eyesore of a TL will affect business •Golf course is 4 years old, has not observed changes in natural landscape and has not been affected by other projects to date •Thinks access will be affected by construction, operation and maintenance. Will also take away from the pristine nature surrounding the golf course and allow more access on that side of the golf course (where there was a natural barrier [forest]) Also thinks visual quality will be affected •Important natural environmental features include the forest (that will be removed), the river (won't be affected) and the natural state around the golf course that will be disrupted. KPI's 1)Minor concerns 1 – proximity to golf course and 2 – perception of health concerns 2)Happy with development, to keep bills down, and MB to be a major supplier of power 3)Yes, nothing substantial other than perception issues. -> just general perception and concerns 4)Farming, it's [TL's] an eyesore, so anything/anywhere with little population around it 5)Yes, planning to develop land for extra golf course, closer proximity & eyesight of transmission line 6)Golf course 7)Yes, definitely. One this going for us is we are surrounded by nature. The TL is an eyesore and will affect the golf course. It will affect the number of people coming to visit the course. We get lots of national & international visitors. 8)Golf course is only 4 years old 9)Yes, aesthetic values 10)Yes, access to golf course & visual 11)Judging by the map I think it will 12)Yes, because it goes through naturalized area, so it will allow access to our lands on the golf course 13)Yes 14)Yes, will hinder access and take away from the pristine nature of the surrounding area 15)Forest (that will be removed), the river (won't be affected) and the natural state around us will be disrupted 16)Not yet</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P108	1/14/2015	<p>Recreational User Group KPI's - Manitoba Lodges and Outfitters</p> <ul style="list-style-type: none"> •Concerns about bear outfitters along the TL, should also speak to f Blackjack Outfitting •From an association perspective, would like to see a compensation program (similar to BPIII) for outfitters that are losing area, bait areas, stands, etc. to compensate them for their time to relocate their bait areas and stands •Anticipates disruption to bear population. Transmission line construction will scatter bears, damage denning sites. Have already noticed this with BPIII. •Concern about the TL opening area up to resident hunters and poachers (especially poachers). TL's are a good area to hunt deer. In BPIII, the line was zig zagged in areas to reduced hunting and visibility to a few hundred meters. Other mitigation factors including letting brush grow. •Outfitters wouldn't take clients to hunt on a hydro line, but resident hunters and poachers don't care. •Doesn't want to see toxic waste spilled on the line. •Doesn't see hydro lines being really disruptive <p>KPI Questions</p> <ol style="list-style-type: none"> 1.Yes, a few bear outfitters along the transmission line. (Matt Epp, Blackjack outfitting, north of Ken, in the initial corridor) 2.Deferred to outfitters on that. From association perspective, requested for BPIII there be a compensation program for those that lose area bait stands, etc from the line. Working on details for BPIII <p>Officially request that would like to see same thing for this project (similar compensation program for outfitters to pay for time to relocate</p> <ol style="list-style-type: none"> 3.No 4.No position on that 5.None on the go 6.- 7.- 8.No other projects in the area <p>Anticipate disruption to bear population. Transmission line will scatter bears, damage denning sites. Already noticed this with BPIII</p> <ol style="list-style-type: none"> 9.No position on that 10.- 11.See #8 12.There could be, yup. Concern about resident hunters, it improves access for hunters & poachers, more opportunity for illegal hunting. Good place to hunt deer. For BPIII, they had a zig-zag model in some areas to help with this (Every few hundred meters). Other mitigation factors like letting brush grow (to reduce visibility for hunting) <p>Our clients wouldn't take clients to hydro line, but resident hunters don't care</p> <p>Resource User KPI's - Snowman inc.</p>
R3-P109	1/15/2015	<ul style="list-style-type: none"> •Should talk to the three clubs that will be affected •1) Central Region – The Cross Country Snow Drifters •2) Ste. Anne Area - Snow Raiders Snowmobile Club •3) Woodridge area – Southeast Snowriders <ul style="list-style-type: none"> •Concerns about effects on SnoMan trails in the area and if trails need to be re-routed and the costs associated with that. SnoMan trails have dictated access with Manitoba Conservation and have an agreement with them that companies that come in, if they need to re-route trails that the company help cover costs so that SnoMan doesn't have to take on a huge financial burden because it is a labour intensive job to clear new routes (and occurs in the summer) •Suggested it might be due diligence for MB Hydro to work cooperatively with SnoMan and clubs to preserve trails (and move line over a few feet if that's what it takes to preserve the trail). •Also concerns on biosecurity and the spread of disease (with the TL). Issue is with Canola. It isn't currently a big issue in Manitoba but SnoMan is trying to be proactive on the issue. There are lots of protocols in place in Alberta because it is a huge issue there. This can be an issue if there isn't enough snow and dirt is hit (while snowmobiling, ATV'ing, work occurring, etc). <p>•Important rec areas – ATV Manitoba is setting up a trail system to have a designated ATV trail. Rec areas for snowmobiling need to be discussed with the individual clubs.</p>
R3-P110	1/15/2015	<ul style="list-style-type: none"> •Thinks the Project is a waste of the provincial government's money and they should not build it (no benefits) <ol style="list-style-type: none"> Q1- No Q2- No Q3 – No health concerns; but building the line will create more access with equals more users in the areas which will permanent effect the animals and species in the areas (e.g. garbage and the animals will get use to human interaction). Q4 – Doesn't think the Project should be built at all; the Project should be built where other transmission lines already exist (e.g. through eastern Manitoba) and on already deforested land e.g. agriculture and farmland (although he recognizes this would not please the owners of this type of land). Q5 – No, not aware of any other major projects in the area Q6 – The project will affects future lands wherever they decide to build it; it may especially effect Sands Lands Provincial Forest Park Q7- No Q8 – No, other than Sand Lands Prov. Park Q9 - Not everyone wants the Project, they are noisy and cut out radio communication; and are ugly Q10- N/A Q11- Not recently Q12 – No one likes seeing them around already, you have trees all around and then all of a sudden a vacant peace of land, they are an “ eye soar” Q13 – N/A Q14- There are people out there all the time, the construction and operation phase of the Project will just increase the number of users in an that is already very busy (**noted that the area around La Borquerie had the highest concentration of hunters, snowmobilers and ATVs in all of Manitoba**) Q15 – All types of personal and machine related transport are used to access the wilderness area (e.g. truck, ATV, snowmobile, boat, walking in etc.). Q16) Yes – there will be consequences with increased access to a TL ROW (e.g. increased traffic volume and users) Q17) The area will get a lot busier during all phases of the Project, once the ROW is opened up it will have people going through it all the time (e.g. snowmobilers, hunters, ATVs). Q18 – Doesn't think any of the effects can be mitigated, once they project goes through, there isn't much the locals can do about it. Regarding organizations who might be interested in helping advise educate the public on guide and use of the area this would be directed to Manitoba Lodges and Outfitters Club Q19 – There have been forest fires in the past couple of years from more recreational users in the area Q20 – “pristine wilderness” is considered to be the most important natural environmental feature of the landscape (personally) and to his customers. People come to the area to get away from it all and enjoy the untouched scenery and quiet (the ROW would ruin this); Q21 – N?A forest fires have ruined certain areas – they look like clear cut blocks after Q22- Do not built it

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P111	1/20/2015	<p>Resource User R3-P111 - Sandilands Club President, contact person for AtvMB</p> <p>Q1) This preferred route is the one he would have chosen (over the other alternative route). No concerns with this preferred route.</p> <p>Q2) Yes, create jobs for locals in the area, whether logging or hired on the line as labourers.</p> <p>Q3) No, don't think there will because it's not a population area. With this route, it won't affect any population areas.</p> <p>Q4) On current TL's, there are agreements with SnoMan to have trails along the TL, so maybe AtvMB could have a similar agreement where they could have ATV trails along the TL</p> <p>Q5) No, not now with preferred route (previous routes there would have been)</p> <p>Q6) No, not any that would be affected</p> <p>Q7) no</p> <p>Q8) Besides logging, sometimes waterways are altered slightly, but usually it's more of a benefit because a road is created. So it's just forestry loss. - There have been issues in the Sandilands Marchard to Stuartburn – grass fires, fire from ATV derby in Woodridge in 2008 (so derby is no longer held), In 2012 there was a massive snow and wind storm that devastated the Sandilands Forest Area. -Has restricted access in some areas due to these events</p> <p>Q9) no won't affect appreciation, maybe hikers/bikers because change to forest but in this area there is not a lot of tourism.</p> <p>Q10) No with respect to new line. Only effect may be construction thoroughfares where heavy traffic may be going (when crossing roads may affect snowmobiles and ATV's)</p> <p>Q11) most people don't ride in this area because it's swamplier, especially along the 208 line. Richer to 212 (Piney) there is not a lot of traffic so shouldn't affect anyone</p> <p>Q12 (&13)) Consequence in increased access during construction is logging and heavy equipment increase</p> <p>Q14) Increased heavy traffic. If using 210 or Highway 12 or 404. If signage is posted well people will get the point (to look for heavy machinery and traffic)</p> <p>Q15) scenic trail system, trees & natural scenery. Don't like the idea of strip logging. This line shouldn't affect that</p> <p>Q16) east of Woodridge, there is a gas line, wood line and a steel line. In some areas they are right next to each other, so there are large strips of forest gone, but lots of people using steel & wood lines to ride on. Access still fine in the middle. 1,000 km of trails around Woodridge, many still impassible (because of fallen trees & debris), so far a quick ride will go up steel line and down gas line.</p> <p>Q17) no</p> <p>Q18) would like to talk to his dad for his opinion because he has worked on the steel line to see what types of issues they ran across for opposition and thoughts in the community.</p> <p>Q 19) no</p>
R3-P112	1/21/2015	<p>Q1/general discussion: When we take off north down the runway, there are transmission lines ½ mile away. Any obstruction over 100 feet high is inconvenient. If these lines are going on the south side of the current lines, it will be very inconvenient, but if they are going on the north side of the current TL it's not an issue. It becomes a problem on a hot day with a heavy-loaded aircraft to have obstructions.</p> <p>Change to land use would affect us. Currently, 80 acres is required for having housing development on a piece of property. The airport is more concerned with residential development and that it may be changed to 2 acres and have residential development occurring nearby. They don't want residential development nearby because of increased people in the area which may increase noise complaints, safety complaints, etc.</p> <p>In Canada, there is no notice given to airfields on the development or construction or hydro towers, just one day they are there, which can be a problem because airfields are not informed and maps are not updated and all of a sudden there is a new obstruction in the sky for planes. Updated maps and information is not given to the airfields of these, which can cause serious hazards.</p> <p>Q2). Probably, positive for our electrical infrastructure grid but managed by an inept government</p> <p>Q3) No probably not an issue because it's a DC Current. In the States had seen a movie where people were holding up lightbulbs and they'd light up but was sure that was an AC current. DC lines – don't think it's a problem. Had a cabin near power lines and it was ok, nobodies kids came out with a third eye.</p> <p>Q4) best land use would be agriculture. Usually on an ROW and usually has agricultural land around it.</p> <p>Q5). No. We buy up real estate when available to prevent housing development and reduce the risk of people complaining. No plans for an expansion though. Currently have 234 acres. We rent out the agricultural land to a farmer.</p> <p>Q6) No that someone has done around us. No labour force</p> <p>Q7) TL and cell phone towers – potential air hazard, are more of an obstruction in the air. In built up areas, planes must fly 1,000 feet off the ground, but when close to airports planes must go lower [to land] so any obstruction causes a hazard. The airfield is not in favour of any type of development within 5 miles of the airport that is more than 100 feet high.</p> <p>Q9) no</p> <p>Q13) anything with the airport, infrastructure improvements include road maintenance</p> <p>Q18) no</p>
R3-P113	1/29/2015	<p>Recreational User R3-P113 - Business Name Removed</p> <p># of rooms – 4 Busy season – slower in the winter. Usually 2 rooms are vacant. In the summer we are usually booked with TCPL. We also have 1 room that is always rented for trucking</p> <p>Q1) Absolutely. Two major concerns. 1) Coming across adjacent to land. Hoping no trees will be removed because of the hydro line, some trees make my holes, they are on the road allowance that would never be developed and that's where the TL is planned to go. This would cause affects to my livelihood and would affect hole #1 for sure. 2) With the TL, the corridor for quads and snowmobilers. Who will pay for the fence line to border my property? Lots of ATV'ers and Snowmobilers do not have respect for private property owners and trespass and cause lots of damage. Each green is valued at \$50,000, so if ATV's and snowmobilers start using the golf course and tearing up the greens and causing damage, it will cost \$50,000 per green to fix, along with lost revenue during this time. -The humming of the line affects more in the winter than the summer. -Eye sore running by the golf course. Might not make a big difference to golfers so not as many concerns about this aspect -Big problem with opening the corridor. -It looks like it is a done deal, hoping Hydro will work with us and compensate us for the actual value of effects. There are many other routes they could have taken but they were more expensive and they took the cheapest option. -Do NOT agree with the hydro line going up, think it's a joke. Our province is a have-not province that keeps spending. Major concern is the fencing issue (to keep ATV's and snowmobiles off of his property) and the tree line (wants it to stay there and not be cut down).</p> <p>2) no (does not feel there will be any positive effects to transmission line development)</p> <p>3) Yes, scares of leukemia concerns. Is worried about the Brits and Scottish people (tourists) (and their perceptions) because of fear and scare tactics about cancer and scare of hydro lines. Don't know if it's true or if it's just scare tactics. Not concerned about health effects for himself.</p> <p>4) Best land uses are swamp. The swamp route was better because it was not conflicting with any humans. If he could stage a protest on the land he'd get arrested, but if it went across the swamps it'd be better. It's a cost incurred, not environmental effects that they are concerned with. The environment will regenerate after the project is constructed. Right now there is road access every 2 miles minimum so they don't have to worry about the cost of flying in equipment and concrete. (which is why he thinks they chose this route rather than going through the swamps, b/c Hydro didn't want to pay the extra costs to fly in equipment and resources).</p> <p>5) Short term, no. Down the road it could be because there were plans for residential development (in the next 5-20 years) along the golf course, but no immediate plans. This will kibosh residential plans because it's not a desirable location to be looking at transmission lines and living next to them. So long term, yes it possibly will affect them.</p> <p>6) golf course</p> <p>7) Covered in #1</p> <p>8) Other than the river, no. River changes/shifts all the time. The Seine River runs through the golf course and changes all the time. The TL will be going over the Seine River.</p> <p>9) Absolutely. At other golf courses, people complain about Transmission Lines, but there they run through the golf course. Aesthetics alone make them undesirable.</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P114	1/30/2015	<p>Rec Users KPI - Ile Des Chenes Motor Hotel</p> <p>Q1) no Q2) no, anything to help with community, we are supportive of. We are actively a part of the community Q3) no Q4) not sure Q6) TransCanada Center holds banquets & fundraisers Wildlife rehabilitation center is being built, it is a multi-million dollar project. It takes rescue animals like lynx, birds, owls to rehabilitate back into the wild Q7) not at this time, as long as they're aware of their surroundings Q8) nothing Q9) yes Q10) don't think it will because lots of ways to get to everything, even if people have to be re-routed, it will only take an extra minute, it's not like it will take an extra 2 hours to get somewhere. Q12) can't wait until see what's going on Q13) no, the more we bring into the restaurant the better. Higher volume is good for our community. Everything I hear from customers about the project is positive Q16) no, past development has made the town look better (the new condo developments for example) Q17) the wildlife rehabilitation center Q18) no Q19) for sure (can contact again) Q20) yes</p>
R3-P115	2/11/2015	<p>Recreation Users KPI's - Headingley Motor Inn</p> <p># rooms – 12 Vacancy rates – 0% during busy season (spring to summer). Rest of the year vacancy rates around 40%</p> <p>Q1) no Q2) always positives to developing something Q3) no, first I'm hearing of it Q4) residential Q5) no Q6) community club – pretty small Q7) no Q8) no, been some flooding, but that's to do with weather Q9) no Q13) no Q14) no Q15) no Q16) no Q17) no Q18) no Q19) no Q20) yes</p>
R3-P116	2/11/2015	<p>Tried to discuss the KPI's - Business Name Removed</p> <p>Manager does not seem interested in participating.</p> <p>I asked to speak with the manager when I called the Sleep Suite Motel. I gave him information about the project and let him know that I was interested in doing a KPI and that it would take approximately 10 minutes. He said "I'm busy" and that I could try and call back some other time and see if he wasn't busy then. I asked when a good time to call back would be and he said he didn't know but I could just try whenever. I let him know that I wasn't a telemarketer and gave him a bit more information about myself and the project and the types of questions on the KPI's and he said that I should try calling somebody else instead. I thanked him for his time.</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P117	2/11/2015	<p>Rec Users KPI's - Business Name Removed</p> <p>Q1) don't know anything about it 2) no idea 3) no 6) Spruce Woods Provincial Park 10) no idea 15) Provincial park, Spirit Sands Desert 16) not that I'm aware of 19) I guess so yes 20) ok... don't know anything about the project at all</p>
R3-P118	2/12/2015	<p># rooms – 8 (just added on 4 rooms recently for a total of 8 rooms now) Busy season – summer is always busy. Needs advance notice for reservations</p> <p>1)No, hear a lot of people complaining about it though, especially north of here in the 501 area. 2)I'm Catering hydro meetings, so that's a positive 3)No, try not to think about that stuff. I know a bit about it but I try not to think about it. 4)Crown land would be best 5)No, already done. 7)no 8)no, highways are always doing work, but just repairs and maintenance. 9)No 13) no 14) no 15) no, recently added 4 rooms (for a total of 8), should have done more 18) no 19) sure, go ahead 20) yes</p>
R3-P119	2/12/2015	<p># rooms – 2 that I rent on a normal basis. The spa room can be converted to a third bedroom if needed. Busy season – June, July & August, we have a 0% vacancy rate during those months. Busy all year round though because we specialize in retreats & wellness for spa weekends.</p> <p>1)I don't want it. I don't like big corporations coming in and changing the environment. Electromagnetic Field (EMF) will have negative impacts. Concerns about that. Even concerns with windmills in St. Leon & ill effects of man-made energy. 2) Should bring a lot of business to accommodations and restaurants. Assuming this will be a big thing. 3)Health effects of EMF. Disruption to nature, wildlife, going through pristine nature. If studied the ecosystem and environment, will have an effect. How many trees will be killed? It's our oxygen. -Always greed & big dollars that win -How I think a bird will be affected won't matter. -Will see effects, people will be seeing me because they're not feeling well because they have cancer, so I will get more business -Whole economic thing. So more business in the community. Good that comes from it and also bad that comes from it. -Need to live with the consequences of our actions. Is it worth the consequences of that footprint? It'll be our children's generation that have to clean up that mess.</p> <p>4)None 5)No, not for hydro, quite happy with my business the way it is. Maybe some remodeling, but nothing big planned. 7)No, only been here for 10 years so not aware 8)No 9)No 13) no, that that we haven't covered already 14) haven't really thought of it. Depending on size of workforce, might be scrambling for B&B's if all the hotels and motels are booked. It's tricky for me because my focus is on spa & wellness retreats, not sure if I want business with people/company/project I don't support. I'm not allowed to discriminate. If Manitoba Hydro wants to book all my rooms at a big chunk of time, how does one manage that? I have ethical issues with the project, I'm not sure how I'll handle it. - There aren't a lot of accommodations in the area besides Steinbach Days Inn and Frantz Motor Inn, will people travel back and forth to Winnipeg? - it will definitely have an impact. I will cross that road when I get to it. Maybe I'll have to expand depending on the amount of business and required rooms.</p> <p>18) no (covered in # 3 and #14) 19) no 20) I have no problems sharing anything. I'm good with that!</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P120	2/12/2015	<p>Recreational User Groups KPI's - Names Removed</p> <p># rooms – 3 cabins, 250 campsites Busy season – open during the spring/summer</p> <p>1)Totally against this project. It's a dictatorship, project should be stopped. It's too much money, I don't see the benefit. It's wrong to expropriate people's property. Lots of friends and neighbours will be affected. I know lots of people that bought property and can't build on it now because of the Transmission Line because it either goes through their property or is an eyesore beside their property. Hydro is taking land and giving a little bit of money. Not a lot. People would have bought somewhere else to build instead of there. 2)No, can't think of ONE. Lots of greedy people will make money. Using our tax dollars to make money for themselves. They'll probably lose money and raise our rates. They are hoping to bring in revenue but can't prove it. 3)I don't have enough info, have heard of maybe some negative health issues. 4)Over Crown Land as much as possible to avoid disturbing people's property. Going through too many populated areas right now. I feel for the people. 6)Snow trails, etc. Hydro lines probably won't affect it much, rode sleds up hydro lines up and it's fine. No issue with Transmission lines going up no-man's land. Not the best thing for wildlife with noise and the process of putting them in will be devastating. 7)Yes, short term during construction. Not once in operation. Haven't seen wildlife stay away from power lines. 8)Fires in southeast (natural0, so no, nothing at this point. 9)Yes I think it would. 10)In immediate area. Probably won't affect my business, it will be east of us. The pipeline will affect us, going through my property (at the back), there will be noise during construction, but the pipeline will be underground after that so not an issue. 11)Won't be visible for us 13)no 15)clean air, maintain our forest and wildlife as much as possible. "We Must be Careful with the Foot Prints We Leave Behind" 16)Covered it already 17)TCPL Pipeline – natural gas to oil 18)No, I think I said it all. Need to review the process. Something is wrong with the process if they have to expropriate property. They have changed the route a few times, but there are still errors that need to be corrected. -> in too densely populated areas. Hope they reconsider the entire project. If it must go on, the path chosen should affect fewer home owners, shouldn't be by people's houses, should be moved to affect the least amount of people 19)Sure 20)Yes</p>
R3-P121	2/18/2015	<p>Manitoba Health, Healthy Living and Seniors Southern Health Winnipeg Regional Health Authority</p> <p>Current population health trends, potential impacts of project and recommendations for maximizing benefits and minimizing adverse outcomes</p> <p>Notes/ Key Discussion:</p> <p>1. Current trends in population health:</p> <ul style="list-style-type: none"> •The southern municipalities surrounding the city of Winnipeg are rapidly growing with lots of housing developments. There are several new subdivisions in small areas outside the city of Winnipeg. •The eastern leg of the transmission line is much less populous, with a forested grassland area. It is also further away from health services. •For people living in areas surrounding Winnipeg, the health care services are primarily concentrated in the city. •The only ER to service the east leg of the transmission line is the Steinbach ER. The Vita ER is no longer staffed. •Should try to avoid highly populated areas, such as what is likely the St. Norbert area. The transmission line goes through rapidly growing areas – are there other less-populated routes in terms of the impact on the city of Winnipeg? •St. Vital and Fort Garry could be relevant project areas to look at in terms of community health trends, although there is nothing specific to note at this time in terms of differing trends. •Health is better around the city of Winnipeg – the further away you go in Southern Health, the poorer health becomes. <p>2. Challenges with capacity of health care services:</p> <ul style="list-style-type: none"> •There are no facilities right around the city of Winnipeg; residents would have to go into the city or access small 1-2 person clinics in Ste. Anne, Niverville, or St. Pierre. Steinbach has the majority of family physicians, an access centre, and walk-in clinic. Vita Health Centre is not consistently staffed. Sprague has a community health clinic staffed by a Nurse Practitioner. There are limited ER services in this corner of the province. •Do not think there are problems with staffing within Winnipeg but wait times to see physicians at certain hospitals are longer than others. Southern Winnipeg relies on the services from Victoria General Hospital. The city of Winnipeg is moving towards quick care clinics to deflect some types of patients from going to emergency. For example, a person with influenza-like symptoms could be seen at a quick care clinic or walk in rather than emergency. <p>3. Experience with past projects</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P122	2/20/2015	<p>Health RPT 13 - Province of Manitoba - Office of Disaster Management, Health, Healthy Living and Seniors Department</p> <p>Note: RM elected to reply to the interview questions in writing. The questions (in italics) have been included where necessary to provide context for his responses, which are presented in direct quotes.</p> <p>1.Current conditions for disaster management services</p> <ul style="list-style-type: none"> •“The Office of Disaster Managements mission is to ensure the Health Sector is able to effectively prevent, mitigate, prepare for respond to and recover from all emergencies and disasters.” •“Our Office is located at Unit 7 1680 Ellice Avenue in Winnipeg, Manitoba.” •In terms of coordinating with other programs and services, “We have several networks and individual stakeholder groups that we work with on a regular basis. There are approximately 10 networks from municipal to national and approximately 65 individual stakeholder groups that we work with.” •Are there any changes that are planned or predicted in the future that may impact your capacity for disaster management? “No” •Are there certain situations where disaster management services become overwhelmed? How can these situations be avoided? “No, as we have the ability to reach out municipally, regionally, provincially, and federally for assistance.” •Do you currently experience any staffing shortages? If yes, why do you think that is? Do you foresee this challenge being alleviated through current efforts or is this just a continuing challenge? “No we are not experiencing staffing shortages.” •Based on your experience, what are the key issues for disaster management in and around the Winnipeg area? Is there anything that is unusual, surprising or important to note? “The Office of Disaster Management follows key operational foundations to ensure we are ready to provide assistance as required. Some of those foundations are: CSA Z1600, All hazards Common consequences approach to emergencies, Hazard risk vulnerability assessment.” <p>2.Anticipated effects on the health areas</p> <ul style="list-style-type: none"> •“Large construction projects have not affected usage of our services in the past.” •Have you ever coordinated disaster management services with Manitoba Hydro on past projects? “Yes we work with Manitoba Hydro on almost a daily basis. This begins with their Corporate Emergency Response Co-coordinator. We also plan various exercises and educational session with Manitoba Hydro asone of our stakeholder groups.” •Based on what you know about the project (see Project Description), how do you think MMTP will affect the usage of disaster management services in the context of potential accidents and malfunctions? “We do not think that it will affect us at the Office of Disaster management.” •Based on the types of work Manitoba Hydro will be undertaking for the MMTP, do you believe your services will be capable of meeting their needs? “Yes, and as MB Hydro’s capabilities are increased, so will be the Provinces’ capabilities, which is also positive for us.” <p>•Do you think there are community health issues or anything in terms of current disaster management services that could impact this Project and that MH should know</p>
R3-P123	2/20/2015	<p>1.Current health care services</p> <ul style="list-style-type: none"> •To the west, the Bethesda Regional Health Centre (BRHC) services communities between Steinbach and Morris, including the area east of Highway 75 down to the Minnesota border. To the east of BRHC, Steinbach services communities across to the Ontario border, south of the Trans-Canada Highway. Between Steinbach and Winnipeg – an area with many bedroom communities – residents can choose between services in either centre, although if specialist care is needed, residents must travel to Winnipeg. •The southeast corner of Southern Health doesn’t have a very large identified Aboriginal population. Parts of Roseau River Anishinabe are broken into two pieces in the southeast corner, and Buffalo Point is down by border. There is a large Metis population throughout the southeast corner of the province. The majority of the Aboriginal population is located in the north area of the RHA, Portage La Prairie. Doretta Harris (Regional Director Aboriginal Health) would be a good resource. •BRHC serves approximately 35,000 to 40,000 people in the Rural Municipality of Hanover, but including other surrounding areas, it serves around 80,000 people. •BRHC currently has 76 beds open and in operation. •BRHC is the main Emergency Room and provider of secondary care in the southeast region of the province, including the majority of surgical and birthing services. It also has a mini-intensive care unit. MVA [motor vehicle accidents] and other trauma cases come to BRHC before Winnipeg (unless they require a tertiary level of care). •Current capacity of the ER is 22 beds (15 treatment spaces, 4 observation beds, and 3 open intensive care). •16 beds are dedicated to surgery, although most surgeries are day surgeries. In-patient surgeries require a short stay in the hospital of approximately 3-4 days. •Offers general and some orthopedic surgery (no fracture repairs or hip surgeries – these patients would go to Boundary Trails Health Centre). About 2/3 of the procedures provided are scope procedures, both scheduled and emergency – total of about 7,000 to 8,000 procedures per year. •The BRHC Emergency Room has 25,000 visits per year. •BRHC offers all diagnostic services (including ultrasound, X-rays, CT scans and labwork) apart from MRIs. MRIs are provided at Boundary Trails Health Centre. •From time to time, visiting services (e.g. stroke or ortho) are provided by itinerary physicians. BRHC is looking down the road at adding other specialties, such as pediatricians. •BRHC is currently meeting demand but struggling with bed management and patient flow. The Health Centre is aiming for 82-92% bed occupancy, although current occupancy is running close to 95%. Part of the struggle is managing beds for the elderly population, who need to be located in a proper setting. Southern Health is in the planning stages for more personal care homes. •Staffing shortages are experienced every day, in disciplines across the board – not just nursing. As Steinbach is only 45 minutes away from Winnipeg, people choose to live and work in the city. This will likely be a continuing challenge. •Within BRHC, Mental Health Liaison Nurses work in the ER to address mental health challenges and try to keep clients out of hospital beds where possible. They also work with challenging elderly clients. <p>•Steinbach has a crisis stabilization unit (at 450 Main Street) with a short-stay unit for those on the verge of decompensating; this also prevents long-term admissions.</p>
R3-P124	2/25/2015	<p># rooms – 6 motel rooms</p> <p>Vacancy rates/busy season – no busy season. We are so close to Winnipeg and Steinbach we aren’t busy. It’s very intermittent. Not usually full. If we’re busy it’s because there is a function.</p> <ol style="list-style-type: none"> 1)No idea, not sure. What’s there is there and at this point we just accept it 2)No 3)None that I’m aware of. But don’t like close proximity to transmission lines. Personally, I don’t want to live near a transmission line 4)Strictly farming or bush area. No residential. Non-usable properties 5)– 6)– 7)Yes, storage units built behind us, didn’t feel it was an appropriate spot. 8)Yes, but if in commercial area that’s fine. I like to see growth but it should be in the appropriate place. 9)– 10)– 11)– 12)– 13)No 14)If not near the business it shouldn’t be a problem 15)Yes, we would be able to accommodate 16)– 17)No 18)No 19)Ask for Bernice or call and leave a message if you have further questions

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P125	2/26/2015	<p>Bus & Ind RT 13 - Business Name Removed</p> <p># rooms – 12 Vacancy rates – 30%</p> <p>1)Don't know much about it so hard to give an opinion. There is a petition going on. 2)Can't comment, I don't know 3)No 4)No idea 5)Not at this moment 6)– 7)No 8)No 9)– 10)– 11)– 12)– 13)No 14)Ya it'd be great if it helped business but don't know that 15)Sure 16)– 17)– 18)No 19)Sure 20)Can use information but can't reference her name</p>
R3-P126	3/17/2015	<p>Environment RT 13 - Rivers West</p> <p>RM of Ritchot only area she sees would be impacted for Rivers West. Her mandate is Emerson to Lake Winnipeg along the Red River.</p> <p>1)Most communities have the NIMBY effect. Her biggest concern is the negative environmental impacts on areas where the Transmission line is going. Looks like they've tried to avoid land where there is development and are mostly on agricultural land. 2)Positives – job creation, innovation, positive impacts to the Manitoban economy of selling hydro to the U.S. -> positives are all on the economic level. 3)No, as long as don't transmit emulsions of gas that impacts people's health (she was under the impression it was all underground. When she realized it was above ground she got worried about transmission of something... maybe EMF?) 4)Agricultural and light industrial 5)Not us 6)Recreational stuff we do is along the Red River Corridor, only is the floodway between Grand Pointe and La Salle. Assuming would go around the floodway because can't see them building on floodway. Fishing and other activities on the Red River. Where the TL would go is not a popular area for boating/fishing activities. 7)No 8)Aesthetic concerns, that may decrease property values 9)Only access point along Red River, north of St. Adolphe 10)There may be, some people will be against the project. Projects of this magnitude will be controversial no matter what. Manitoba Hydro is smart to do public consultation and interviews in advance to avoid problems in the future. 11) Some increase in traffic from construction, same as any project. Not a huge impact on our area (Rivers West Area) 12)No 13)Red River is a tributary to Lake Winnipeg. Natural environment is important. Important features include water quality, wetlands, green spaces and river bank stabilization is all important to us. If working near tributaries to the Red River, (Ex: Rat River), they need to be cognizant of maintaining integrity of river bank stabilization. If can create wetlands that would be good. 14)– 15)RM of Ritchot – Grand Pointe area – housing development. Sure the TL will be an issue for the RM of Ritchot but up to their council to talk to MB Hydro about that. Also CentrePort, housing developments in west side of Winnipeg. Hydro needs to make sure there is no negative impacts on other projects from this development.</p>
R3-P127	3/18/2015	<p>Bus & Ind RT 13 - Business Name Removed</p> <p># rooms – 70 Occupancy Rates – Winter 60%, Summer (March to Sept/Oct) is approximately 90-95%</p> <p>1)No 2)Won't impact us 3)No, it's going through anyways 4)Neither here nor there 5)No 6)– 7)No 8)No other than perimeter expansion that's been going on for the last few years 9)– 10)– 11)– 12)– 13)No 14)Not sure, not sure what's involved, if re-routing traffic then yes. 15)Yes, first come first serve for who gets rooms. We have a very busy construction season. 16)– 17)– 18)No 19)No, call anytime 20)Absolutely, go ahead</p>
R3-P128	3/30/2015	<p>Caller called to inform Manitoba Hydro she is opposed to the project as it comes within a mile of their property. She has concerns regarding health, noise, wildlife affects and property value. She feels the project should stay away from people and homes and go through the Crown land further east of La Broquerie.</p>
R3-P129	3/31/2015	<p>Caller called to indicate he was not happy with the preferred route, would prefer to see the line move further east. Is planning to subdivide and feels the project will</p>
R3-P130	4/2/2015	<p>Called to inform Manitoba Hydro of new address</p>
R3-P131	4/2/2015	<p>Realtor called indicating she is the realtor for a landowner who is very upset about the project potentially crossing his property. She called regarding property value and</p>
R3-P132	4/8/2015	<p>Caller called from the city of Winnipeg to get more information on why they received a letter regarding MMTP. The Manitoba Hydro representative indicated that the preferred route crosses the rialway and aquaduct right of way just east of highway 12, which is owned by the city. Manitoba Hydro is informing the city of the potential</p>
R3-P133	4/8/2015	<p>Caller called to inform Manitoba Hydro that he opposes the project and does not want the project on his property. He then hung up before the Manitoba Hydro representative had a chance to respond. The Manitoba Hydro representative called him back and left a message indicating Manitoba Hydro is interested in speaking to him</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P134	4/9/2015	Caller called to say he does not want the project on his property, he has concerns regarding EMF, viewshed and effects to wildlife. He said he sold some of his land last year and wasn't sure if this was still his property or not. The Manitoba hydro representative indicated they would resend the land owner package to him and he would then be
R3-P135	4/15/2015	Caller called to inform Manitoba hydro that he and his wife had no major concerns regarding the preferred route. He had questions regarding compensation and access
R3-P136	4/15/2015	Caller called to inform Manitoba Hydro he was pleased with the route modification presented in round 3 that moved the project from the middle of their 1/4 section to the east side of the 1/4 section. Caller and his wife share the property with another landowner, ALO-050, who strongly oppose the project being on the property.
R3-P137	3/9/2015	<p>Current population health trends, potential impacts of project and recommendations for maximizing benefits and minimizing adverse outcomes</p> <ol style="list-style-type: none"> 1. Current trends in population health <ul style="list-style-type: none"> • There are no current trends in population health of note in relevant (Prairie Mountain Health/Interlake-Eastern Regional Health Authority) Project areas. 2. Challenges with capacity of health care services <ul style="list-style-type: none"> • The Health Centre in Glenboro is a small facility with intermittent ER services; full services were suspended due to a lack of physician providers. Services are shared with Killarney or Boissevain. The status of services at the Glenboro Health Centre is currently unclear, as the operating schedule keeps rotating. It would be best to connect again in 2019 (around the project construction phase) to assess the current status of the Glenboro Health Centre (note: please refer to additional information provided by Garlen Maxwell, Director of Acute Care at PMH, on separate KPI form, regarding current status of services in the Glenboro region). • In an emergency situation, the facility closest to the incident would respond, and depending on the extent of the injury, the patient would be transferred to Brandon or flown to Winnipeg. Brandon is a one-hour drive from Glenboro and has no identified issues with health service capacity (note: please refer to additional information provided by Garlen Maxwell, Director of Acute Care at PMH, on separate KPI form, regarding current status of services in the Glenboro region). • Around Rosser, patients would be transferred to nearest facility in Winnipeg (e.g. Seven Oaks, Grace Hospital) or Stonewall. 3. Experience with past projects <ul style="list-style-type: none"> • No/limited previous experience with previous Manitoba Hydro or large construction projects. 4. Positive and negative effects on population health and health care services <ul style="list-style-type: none"> • Feedback on this topic is similar to that expressed by the other Medical Officers of Health. • No anticipated effects on health and health care services given the small population of workers; effect of dams may be more important. • The project may provide a benefit if short-term work provides increased economic opportunities (depending on who those opportunities will be available to). 5. Vulnerable population groups <ul style="list-style-type: none"> • Affected landowners and farmers in the area are potentially most vulnerable to Project impacts. 6. Recommendations for maximizing benefits/minimizing adverse effects <ul style="list-style-type: none"> • Important to assess the impact of herbicides on farming and water systems, where relevant. 7. Gaps in baseline community health information <ul style="list-style-type: none"> • Information on food security might be available through the Regional Community Health Assessments; PMH is currently updating theirs. Additional information may be available through the Community Health Assessment team at PMH. • Primary care is available in Glenboro but some residents (particularly those residing around Glenboro) may look for care in areas south of Glenboro, or go to Brandon or Carberry. • Residents of Rosser may go to Winnipeg or Stonewall for primary care (uncertain which). • Location of ambulance stations and response times unclear for Glenboro and Rosser. Additional information may be available through EMS at Prairie Mountain Health. <p>• Environmental health officers, drinking water officers and public health inspectors (restaurants, schools, daycares) fulfill responsibilities under their relevant health acts.</p>
R3-P138	3/9/2015	<p>Prairie Mountain Health</p> <p>Key Topics Discussed:</p> <p>Health care services in Glenboro area</p> <p>Notes/ Key Discussion:</p> <p>Note: This email, quoted verbatim, was received from KPI following an interview with Dr. (Medical Officer of Health, Prairie Mountain Health) at her request that provide Habitat with additional information regarding health care services in the Glenboro area.</p> <p>"As I can appreciate you wanting to establish a plan for your project, it is not possible to say what services will be offered where by 2019 in the Glenboro area. I can tell you today that Glenboro and Carberry Health Centers share on call, as well as Treherne and Notre Dame share on call. This means that all 4 sites offer acute and ER services but are not open 24/7. As the number of physicians in each community is small (2-3), the physicians take turns responding to emergencies after hours and on week-ends. So one site or the other is open. Killarney is a larger site and also offers acute and ER services. All of our acute and ER services are dependent on having available 24/7 physicians, diagnostic staff as well as a complement of RN and LPN 24/7. Currently in our health region several areas/centers are struggling with one or all of these components to be able to offer acute and ER services. Sustaining services can be a challenge at times and the region has had to "shift services" where by acute and ER services are not available. As this is a moving target and I could not confidently inform you today where services will be available one month from now; I could not possibly predict what the landscape of our health resources will look like in the year 2019. Should emergency care be required the public is required to call 911 and EMS will be dispatched. Our region offers 24/7 EMS services and the closest most appropriate station will respond to the call. The EMS personal will then transfer the patient to the closest open emergency room. The Medical Transportation Coordination Center considers alternate resources ie, STARS, life flight for all calls and dispatches resources as needed for the situation. I do apologize that I am not very helpful."</p> <p>Issues/Interests/Questions Raised:</p> <ul style="list-style-type: none"> • Glenboro Health Centre is not open 24/7, therefore acute and emergency care is shared with Carberry Health Centre.
R3-P139	3/10/2015	<p>Key topics:</p> <p>Current population health trends, potential impacts of project and recommendations for maximizing benefits and minimizing adverse outcomes</p> <p>Notes/ Key Discussion:</p> <ol style="list-style-type: none"> 1. Current trends in population health <ul style="list-style-type: none"> • Southeastern Manitoba has the lowest rates of STIs in the province, although it is uncertain whether this is due to a truly lower incidence or less frequent testing for cultural reasons (i.e. strong Mennonite communities). • Winnipeg currently has the highest rates of syphilis in 30-40 years. There is also an increased number of cases in Southern Health, but difficult to know if it is an outbreak. • In terms of communicable diseases, rates are pretty stable in the Southern Health region. • Southern Health has lower immunization rates. It does not have a high incidence of vaccine preventable diseases but it has lower rates of immunization across all age groups (more detail available through MIMS). • Southeastern Manitoba has the province's longest established deer tick population, which is capable of transmitting Lyme disease and therefore poses a risk for vector-borne disease transmission in the southeast part of the province. 2. Additional data on STIs and communicable diseases <ul style="list-style-type: none"> • The incidence of measles and mumps is so low as to be nearly non-existent, which may explain the lack of data available at the RHA level. • An STI report will be made available in the next couple of weeks that includes annual rates of chlamydia, gonorrhoea and syphilis broken down by RHA. Rates of HIV are included in a separate report. 3. Challenges with capacity of health services <ul style="list-style-type: none"> • No identified challenges in terms of communicable disease. • In terms of STIs, capacity is not a challenge so much as cultural dynamics. Although condoms and needles are distributed freely in Winnipeg, the STI Coordinator at Southern Health reports challenges to do prevention work. <ul style="list-style-type: none"> • It is important to communicate with the community. Harm reduction activities may be beneficial to the community if they remain in place after the project ends; however, if

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P140	4/7/2015	Wanted to know if there was a set distance from the edge of the ROW where a home could be developed. It was noted that outside of the ROW any home/property/subdivision could exist. Used Sage Creek as an example. He is doing some planning regarding how the project may impact him and what he should do with
R3-P141	4/16/2015	AECOM identifier - R3-LF011W Manitoba Hydro representative followed up with a request from Land owner form from an open house. He wanted to know the width of the ROW from Riel to Anola. The Manitoba Hydro representative indicated the ROW is approximately 330 metres wide. Landowner is also interested in sub-dividing his property and is concerned the property value will decrease with 2 additional line in the ROW which cuts through his property. The Manitoba Hydro representative indicated that they are currently doing a rural property value assessment and will be available for review once the EIS has been submitted
R3-P142	4/17/2015	Manitoba Hydro representative spoke with (City of Wpg manager) regarding the preferred route crossing City of Winnipeg Property which is an ROW with the Shoar Lake Aquaduct and a rail line. He indicated they signed an easement agreement with Manitoba Hydro regarding the BiPole III Project. That agreement had 3 conditions - the City's ROW cannot have any structures in it, there can be no Hydro vehicles crossing the City ROW, and the lines need to allow for sufficient clearance for the City's operation within the ROW.
R3-P143	4/22/2015	<p>Construction labour force in Manitoba – current and future projections, construction labour force mobility, current/approved projects and change to oil industry may or may not affect Manitoba.1)Currently, what is the construction labour supply like in Manitoba (e.g., more workers than work, the right amount of workers, or less workers than work)?</p> <p>The market has balance, although is oversupplied with electricians. That sector [electricians] cannot accommodate any more apprentices. The apprenticeship program has done good with electrician and carpenter apprenticeship programs, but with the rest of the trades – not so much. [he also noted that the apprenticeship programs usually like to let out less people than demand to keep demand up. He also noted that it is hard for guys to get their apprenticeship hours because there are not enough journeymen. Even with the pre-employment courses in carpentry for example, there are not enough journeymen out there to sign for their hours, and most employers don't want to hire them without actual work experience and finding out if they are a good worker. Most workers need to work their way up from the bottom and then companies agree to apprentice them, so the pre-employment program hasn't really helped with that).</p> <p>1a) Is there a requirement for out of province companies to hire local workers when taking on jobs in Manitoba?</p> <p>No, there is no requirement for our of province companies to hire local workers. This industry [the construction industry] is highly mobile and supports mobility. Quebec can worker anywhere in Canada. The rest of Canadians can work anywhere in Canada BUT Quebec. There are no inter-provincial barriers. Provinces have agreements in place on internal trades and contractors can move freely between the provinces. (Ron also noted that having agreements to hire local workers would not be beneficial to companies).</p> <p>2)How has the availability of opportunities in construction labour changed in the Province? Region? Do you expect this to change in the future?</p> <p>Steady growth for the past 15 years. Construction volume in Manitoba has tripled – ramped up to keep up. Biggest change will be what happens in Alberta and where those guys end up. Layoffs in oil industry, but still lots of construction work out there, but once those projects are completed there won't be another big project. There will be an influx of people here [Manitoba]. Contractors will be on work here and people will move.</p> <p>Ron noted that at a conference he just attended, the person for BuildForce presented and said it will be 3 years until Alberta rebounds. Oil won't be back at \$110/barrel but will only be \$80/barrel so there will not be the same pace of growth and demand.</p> <p>3)Does the construction industry in Manitoba regularly seek employees from outside the local project area or outside the province? If so, why? Are incentives given to these workers to come work in the project area/Manitoba?</p>
R3-P144	5/1/2015	Called to confirm that the route does not cross his section. Manitoba hydro representative indicated the preferred route does not cross his property but is on the proeprty
R3-P145	3/30/2015	<p>Key Topics:</p> <p>Current trends in Aboriginal health, potential impacts of project, and recommendations for maximizing benefits and minimizing adverse outcomes</p> <p>Notes/ Key Discussion/Questions:</p> <p>1.Current trends in Aboriginal health</p> <ul style="list-style-type: none"> •If you look at health (broadly defined), indicators would show rising rates of chronic disease, diabetes, hypertension and high cholesterol. Smoking rates are much higher compared to the general population; this is likely related to high rates of underlying stress and poverty, lower levels of education, and fewer job opportunities. The differential access to these determinants has negatively impacted Aboriginal populations. •Positive determinants of health include access to traditional land and participating in traditional activities, cultural events and ceremonies, which is occurring across the country and within these communities. The key thing to watch out for is in terms of potential land impacts in ways that may impact participation in these activities, e.g. ability to trap or collect medicines. <p>2.Health care provision and jurisdictional responsibility</p> <ul style="list-style-type: none"> •It's variable depending on location and remoteness. In general, the province is responsible for any insured service (e.g. physician, hospital stays, medication while in hospital); the feds are responsible for anything that falls outside of that realm in terms of public health and noninsured health benefits: occupational therapy, physiotherapy, medical supplies, drugs, glasses, dental, dentures, etc. •The reason for this variability depends on how far a community is from these services; some may have physician services within the community while others may need to access services through the RHA. For example, Brokenhead has no physician in the community; all residents must go to a provincial site (although they would like to have physician services in their community). Peguis has a health centre in their community, but must access physician services in the town of Hodgson. These physicians are independently contracted through the Northern Medical Unit; their salaries are paid by Manitoba Health but all other expenses (e.g. travel, food, etc.) are paid by the federal government. Many communities would receive some funding from the feds but run services internally. <p>3.Data for Métis food security and traditional food consumption</p> <ul style="list-style-type: none"> •If available, this data might be found in the Profile of Métis Health Status report by the Manitoba Centre for Health Policy.

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P145 (con't)	3/30/2015	<p>5. Experience with past projects</p> <ul style="list-style-type: none"> • Not a lot of direct experience, though have engaged with communities concerned with changes to the fish population or mercury levels in relation to dams (not transmission lines). In general, these projects are not viewed positively by Aboriginal communities. The trade-off in jobs has never been as positive as they thought it would be in terms of balancing the negatives like reduced access to fishing or trap lines. <p>6. Positive and negative effects on Aboriginal health and health care services</p> <ul style="list-style-type: none"> • In terms of health care services, not really much of an effect; there is not much new infrastructure, and the mobile population is not too large or intrusive. The one big impact is in terms of access to lands. Any project can have a potential impact on health if access to land is compromised. Unclear on the width of the path, or what the impact might be on trap lines or waterways. Are there medicines that communities won't be able to access? • If job creation occurs, the effects may be positive and negative. If currently unemployed, there may be benefits, but if means working away from family, it's not great...sort of a mixed bag in terms of effects. <p>7. Communities at risk</p> <ul style="list-style-type: none"> • Any community whose traditional territory is affected (occupied or not) may potentially be affected. Anything that can negatively impact the connection to the land has the potential to impact health. <p>8. Recommendations for maximizing benefits/minimizing adverse effects</p> <ul style="list-style-type: none"> • Limit the amount of territory that is impacted or displaced. If through other studies they find trap lines, ceremonial grounds, spots for fishing, etc., should try to avoid them as a way to minimize adverse effects. • When the right for communities to be self-determining and involved is respected, the [community engagement] process can be empowering and positively impacts community health as a whole. Long-term cooperation and opportunities to continually engage in conversation and decision-making can also positively impact health, as self-determination is an important determinant of health. • If possible, have job creation that is close to home. • Work with communities whose traditional land is impacted; provide restitution funding for medicinal gardens or to relocate ceremony grounds. Restitution should not just be financial but provide opportunities that enable the actual activities to continue. <p>9. Aboriginal Health Programs</p>
R3-P146	4/7/2015	<p>Praine Mountain Health Key Topics Discussed:</p> <p>Current health care services, potential impacts to services, recommendations for minimizing adverse effects and maximizing benefits</p> <p>Notes/ Key Discussion/Questions:</p> <p>1. Current health care services</p> <ul style="list-style-type: none"> • The Brandon Regional Health Centre (BRHC) services all of southwest Manitoba up to the Southern Health border in the east. Communities located near the Prairie Mountain Health (PMH)/Southern Health border, such as Treherne, might access services in Winnipeg, Brandon, or Boundary Trail [operated by Southern Health]. Some communities northeast of Brandon, such as Gladstone and MacGregor, would access health care services in Portage La Prairie or Winnipeg. Communities in the northernmost areas of the PMH region, such as Swan River, often refer patients to Winnipeg rather than Brandon. The community of Dawson [also in the north] has a semi-regional hospital with general surgery on-site. Most referrals are from communities in the southern parts of the Regional Health Authority rather than the north. • PMH has a small Aboriginal health program, although it is not as defined as it might be in larger centres. PMH has Aboriginal HR consultants on staff and provides some services on-reserve, including primary care. • The BRHC currently has 398 beds open and in operation. It has [X number] of surgical units with [X number] of beds, [X number] of ER units with [X number] of beds, and an Intensive Care Unit (ICU) with 10 beds. Currently the ER has [X visits per month/year/average]. Current hospital bed occupancy is between 80-90%. • The BRHC offers general surgery, all types of orthopedic surgery except pediatric, and all diagnostic services including X-rays, MRIs and CT scans. It does not offer brain or heart surgery. • Services are not typically provided by visiting physicians or specialists. • The BRHC is currently able to meet the current demand of the Brandon population. • There are no significant planned or predicted changes in the future that might impact health service capacity. • The BRHC employs [X number] of staff members. There are definitely staffing shortages, probably across all areas, including nursing, allied health, and physicians. There is no real reason for the shortage other than that it's rural Canada, and staffing shortages are an ongoing challenge in the health care industry. Don't see this changing in the short-term. • In terms of mental health services, the BRHC has an adult in-patient unit, a geriatric inpatient unit, and a child and adolescent treatment centre (i.e. outpatient crisis stabilization unit). PMH also offers outpatient community mental health services, such as counseling, across all age spectrums in Brandon. • As the BRHC has no cardiac unit or cardiac cath lab, patients requiring cardiac services would be sent to Winnipeg. Patients with brain or head trauma would also be sent to Winnipeg; although BRHC has two neurologists, they do not perform neurosurgery. Lastly, pediatric patients requiring surgery would be sent to Winnipeg. • People in the Glenboro area with a serious injury would go to the Glenboro Health Centre first, or the nearest open ER (as per policy); PMH has some unique shared on-call situations. The closest open ER might be Carberry (this is most usual, as Carberry shares on-call with Glenboro) or Killarney.
R3-P147	5/4/2015	<p>Landowner has property along the preferred route "QS Specified". He called to let Manitoba Hydro know he has sand hill cranes, geese, swan and bald eagles on his property and has concern the preferred route could affect their habitat. the Manitoba Hydro representative thanked landowner for the information and indicated they would</p>

Manitoba Minnesota Transmission Line - Round 3 Phone Log

AECOM Identifier	Date and Time of Call	Message
R3-P148	5/5/2015	<p>Brandon Fire & Emergency Services (Note email)</p> <p>Key Topics Discussed:</p> <p>Confirmation of #'s on website, # of calls per year and list of vehicles</p> <p>Questions:</p> <p>I just wanted to confirm some information that was on your website:</p> <ol style="list-style-type: none"> 1. There are 72 staff total <ol style="list-style-type: none"> a. Fire Chief b. 2 Deputy Chiefs c. 2 Training Officers d. 4 Fire Inspectors e. 2.5 Admin Staff f. 60 Firefighters/paramedics 2. Areas served include: <ol style="list-style-type: none"> a. City of Brandon b. Cornwallis c. Elton d. Oakland e. Whitehead f. And are part of the Grand Valley Mutual Aid District 3. Total Calls – 4,840 in 2013. <ol style="list-style-type: none"> a. 3,700 ambulance b. 483 alarms c. 416 rescue MVC d. 123 Fire (other) e. 60 Investigation f. 41 Other g. 17 Fire (structure)
R3-P148 (con't)	5/5/2015	<p>And here is a list of the vehicles we have:</p> <p>Quint 2 Pumpers Water Rescue Trailer Tech Rescue/Confined Space Trailer Zodiac Cougar (Brush Truck) Command (Quad cab 3/4 Ton) 3/4 Ton Utility Truck Rescue 4 Vans - Fire Prevention 1 - Chiefs Vehicle 4x4 Laredo 5 Ambulances</p>
R3-P149	5/8/2015	<p>Wanted to discuss Fire Guard 13 and whether MH is considering options in that area. Discussed the feedback received and the routing process. MH would like to know if there is any information the RM would like to provide regarding that area. Discussed that Route 207 is not being pursued and that options are being considered.</p>
R3-P150	5/8/2015	<p>Left message to discuss setting up a meeting.</p>
R3-P151	5/8/2015	<p>Caller called on behalf of his mother who has recently passed away. Owns 1/4 section *QS Specified*. concerns regarding wildlife on the property. He has seen blue heron, white trumpet swans and there is a nice pond that is feed by a creek. Caller indicated he will do a little research on the website and call back next week with further</p>
R3-P152	5/15/2015	<p>Caller called re regarding his deceased Mother's property: *QS Specified*. He is concerned about access managment for the property and would like to see the line moved further west to avoid his private property or would like to see the line include three extra angle towers to route the line around the property line of his property.</p>
R3-P153	5/15/2015	<p>Caller called to see if a legal land survery will be completed for the project. the Manitoba Hydro representative indicated that a legal land survey of private property would be</p>

Appendix F

Route Modifications/Tower
Placements/Mitigation
Measures

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Landowner Form	MLO 700	x			Plan A: segment 207, Plan B: route between 207 and 208 to move away from the shelterbelt, Plan C: move line half-mile east to protect shelterbelt, Plan D: buyout move line 400m west.
Landowner Form	ALO 131	x		x	Plan A: consider route to Round 2 to the west of current location (see map); Plan B: move towers to *QS provided* as it is wet and not very productive; Plan C: land on quarter-section is all very similar, tower placement would not minimize impacts to land owner.
Stakeholder Meeting	RM of Tache		x		In the quarry that is located on *QS provided* in the RM of Tache he would like to see Manitoba Hydro place reflectors of some kind on the conductors themselves if possible. His concern is based on safety for those operating trucks that may be collecting gravel and come in contact with the conductor.
Stakeholder Meeting	RM of Tache		x		If Manitoba Hydro were to ever decommission the transmission line, he would like areas where there are gravel and sand (within the RM of Tache) and an easement exists that the easement be lifted as soon as possible to allow the RM to begin extracting gravel in immediately.
Landowner Form	ALO 052			x	Move line around owned quarter-sections, with buffer of one QS west and south.
Landowner Form	ALO 057	x	x		Prefer self-supporting towers. Calving Ridge
Landowner Form	ALO 097		x		Prefer self-supporting towers.
Landowner Form	MLO 2149		x	x	Towers should be placed so they match up with existing towers. Hydro could develop a better tower design to accommodate more lines on one tower.
Landowner Form	ALO 035	x		x	Two possible route modifications: 1 = north of property for ROW with no towers and 2 = south of property for ROW with towers.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Landowner Form	ALO 084	x	x	x	Would prefer tower to be placed in marsh, south of ridge (less acute angle). Shift in ROW slightly to north-east of current ROW, to avoid ridgeline/heavy bush. No herbicide application.
Landowner Form	ALO 134	x	x		First Nation traditional medicinal and ceremonial harvesting occurring on this parcel, no route modification suggested but does not want line on property. No herbicide application.
Landowner Form	MLO 940	x		x	Three alternate routes suggested: A = southerly route most preferred, following existing gas corridor; B = extend line south slightly to eliminate one turning tower; C = diagonally cut across from one turn to the next to eliminate a turning tower.
Landowner Form	MLO 1934			x	Prefer to see towers on east side of river and west side of Turnbull Rd
Landowner Form	MLO 880	x			Route moved south to cross Hwy 75 straight across.
Landowner Form	MLO 1901	x	x		Use existing corridor to avoid clearing existing trees. Modification increases distance from property, moves south to cross Hwy 75 straight across.
Landowner Form	MLO 072, MLO 658			x	Would like to see towers placed beside D602F in ROW.
Landowner Form	MLO 1002			x	Tower spotting to accommodate general public access point.
Landowner Form	MLO 2106	x			Route moved south to cross Hwy 75 straight across.
Landowner Form	ALO 023	x		x	DATA ON IPAD(Global ID: {76072291-6A2D-4470-A4CF-340EA817D39C}). Prefer at least 1 mile east, review another SE alignment along north tree, north of subdivisions in La Broquerie. Tower placement on IPAD.
Landowner Form	MLO 243		x		Suggested trees on northern edge of property can be left intact.
Landowner Form	MLO 2147	x			Move line 1km further west (for a total of 2km west of property).
Landowner Form	MLO 255, MLO 343 and ALO 059	x		x	Prefer self-supporting towers as owner plans to develop land for agriculture. Prefer to avoid shelterbelt on west side of *QS provided*.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Landowner Form	ALO 079			x	Move tower slightly to west to avoid agricultural production.
Landowner Form	MLO 202		x		Would like to see MH implement a carbon offset program due to all the trees that would be cut down.
Landowner Form	MLO 165		x		Aesthetic mitigation to plant trees on eastern edge of property.
Hardcopy Comment Sheet	MLO 1002	x	x		Move route to north side of floodway away from homes in area.
Landowner Form	ALO 126	x	x		Move line quarter-section east of 302. A solid access-management plan is required to restrict/monitor access to ROW.
Landowner Form	ALO 113			x	Preferred tower placement for manure dragline.
Landowner Form	ALO 008		x		Buffer around creek required.
Landowner Form	MLO 018	x			Prefer route go further east in more natural land; why is the route not along the quarter line in *QS provided* (can it be moved south); see angular re-route on *QS provided*. DATA ON IPAD
Landowner Form	MLO 416	x			Move east-west portion slightly north, away from quarter-section boundary.
Landowner Form	ALO 031	x	x	x	Plan A: would prefer to see towers not go through any of the bush on the property, this is considered the most valuable to land owners; Plan B: route through crown land adjacent to the west side of the property. Avoid shelterbelt around river, indicated on map.
Landowner Form	ALO 016	x		x	Provided a routing adjustment, away from the farm house on still cultivated land but pasture on *QS provided*. Tower placement in lot spot close to Hwy 302.
Landowner Form	ALO 067	x	x		Review a modification with R49R (smaller ROW). Mitigation for fences and gates to restrict access to pits on R49R.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Landowner Form	ALO 044	x	x		Would like land to be kept in current state as this was the reason for purchase. Would like to see a modification if possible.
Landowner Form	ALO 077	x			Preference to go back to original alternative to west.
Landowner Form	MLO 1386	x			Would prefer to see the line run on the north side of the (floodway/ROW/city? - left blank).
Landowner Form	ALO 087			x	Separate MMTP from R49R so he can get equipment and harrows in between.
Landowner Form	MLO 625			x	Want the towers lined up across the landscape (D602F, MMTP, Bipole III).
Landowner Form	ALO 072, MLO 254	x			Move line further from home, preferably on the east side of existing line.
Landowner Form	ALO 133	x			Not on the property, move to parallel 230 kv line; move approx 2 miles further east through crown land; move through middle of 1/4 section to the east which is only pasture lands. Does not like the option of tower placement.
Landowner Form	ALO 038_a	x			Would like to see moved at least west side of existing as it was in Round 2.
Landowner Form	ALO 100	x	x		Would prefer if t-line was moved to the west, by gravel pit, approximately 1/2 mile. Please double circuit.
Landowner Form	ALO 032, MLO 177	x			Modification provided to move the line over to the next 1 mile road.
Landowner Form	MLO 692	x			Move line east of Ste Genevieve.
Landowner Form	MLO 714, MLO 713	x			Use existing Hydro corridors when possible.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Landowner Form	ALO 115	x			Prefer along road allowance versus across property.
Landowner Form	ALO 015	x			Would prefer to see a modification that would minimize potential 40 acres.
Landowner Form	ALO 007	x			Would prefer to see the line follow east of existing 230kv, to minimize impact for future subdivision.
Landowner Form / Ipad	ALO 107	x		x	R3-LF036S - Try to span tracks at less than 90 degrees to run diagonal. Place a tower on corner/edge of triange piece (X2). R3-LF006R - Route adjustment #1: would move PR to back of home- less impact on viewshed. Would be equal distance approximately 480 m between homes. Additionally, the homes on the east side of adjustment face east, therefore viewshed not as impacted. Route adjustment #2: Move line further west from home, may impact other. Route adjustment #3- Lessens impact on south side and impacts home owners to the southwest equally. Route adjustment #4 - add-on to #1. Would this lessen impact homes to the west. Route adjustment #1 is most preferred as it appears to have the most equal impact to landowners in the area. House and route adjustments identified on map. {5869A358-38B2-4B92-8FE9-2ACFC0515EB9} - Alignment would be preferred to allow for useable land and increase distance from home and would cross more bog than pasture.
Landowner Form	MLO 097			x	Lines of MMTP and M602F should be side by side, close together would be preferred.
Landowner Form	ALO 076, ALO 093	x			Move line east side off property line to allow for large equipment and avoid hand-spraying around towers.
Landowner Form	ALO 121	x			Prefers an option east to avoid losing any land, in order to maintain their cattle herd density. DATA ON IPAD (Global ID {3AF49B7E-D41A-4663-861C-73242513D4C6})
Landowner Form	MLO 1686	x			Would prefer lines to be placed in northern corner [illegible].
Landowner Form	ALO 127		x		Interested in getting wood cleared from ROW.
Landowner Form	ALO 025, MLO 143			x	Preference to put towers as far south/north on property line, because view from house is northeast as indicated on map. Does not want on property but would prefer to stay on half-mile line instead of moving closer near their property.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Landowner Form	MLO 1739		x		Maintain as much of a tree buffer with their property and the ROW
Landowner Form	MLO 1441		x		Would like to see a buffer of trees to soften the view and would like to see MB Hydro provide a greenspace type of environment to soften the feel of the ROW (the MB Hydro ROW could connect to the TransCanada Trail which runs to Beaudry Park, off leash dog park)
Landowner Form	MLO 1532	x			Move new lines to northside of the ROW, west of LaVerendrye station, would be further from homes on the quarter-sections and assist with farming operation
Landowner Form	ALO 120	x			Existing line on property, would like to see MMTP line moved east or west of quarter-section. Avoids cutting property in two pieces.
Landowner Form	MLO 145		x		Potential mitigation to reduce impacts on aesthetics from line would be to plant trees on property edge (at least 6 foot trees would be better). approximately a 10 foot strip of grassland north of property (fence) that could accomodate trees.
Landowner Form	MLO 518			x	Placement of towers important for farming (wants to see side-by-side placement for multiple lines).
Landowner Form	ALO 038_b	x			ROW should be on other side of existing ROW.
Landowner Form / Phone Log / Email	ALO 086, ALO 074	x	x	x	R3-LF003A - Move line west, to other side of existing t-line but without unfairly affecting the neighboring lot. Remove the least amount of vegetation as possible. Place line and towers as far from the house as possible. R3-P030 - She provided 2 modifications in her area. Will submit changes in an email to MMTP regarding her modification preferences. Indicated that her preference is to have it back on the west side or to cross over the line to maximize separation between her home and her neighbour to the south. Indicated that it would be brought forward to the project team yet additional angle structures and criss crossing an existing line would not be viewed favorably from a technical design perspective. R3-E058 - Attached map suggests two modifications put forward to landowner. Blue Dot – Location of Residence Yellow Line – Preference for the line to remain on the western side of R49R Orange Line – Stay on the western side of R49R until past her property. Cross over R49R prior to her neighbor (to the south) to the west to maximize separation between both residences.
Hardcopy Comment Sheet	n/a	x			Suggests using electric cables underground
Hardcopy Comment Sheet	MLO 700	x	x		To mitigate "the swath cut along Gosselin Rd will be too wide a disconnect for many mammals to continue to cross from the riverway", white noise health concerns and property value: move line to the bush away from the road, thus creating habitat/clearing instead of just widening the roadway (also maintains shelterbelt), move the line 2 miles east
Online Comment Sheet	n/a	x	x		To mitigate obstructing viewshed, would like to move line approx. 1000 feet southeast of proposed route towards floodway dike.
Online Comment Sheet	n/a	x	x		The route is beside land (floodway) that is public space; the route could be moved 200 ft further south
Online Comment Sheet	n/a	x			line crossing in front of house; would like line moved to the east side of province

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Online Comment Sheet	n/a	x	x		Route crossing their tree farm and concern for camping; use route 208
Online Comment Sheet	n/a	x	x		Concern - wildlife health and migration with cutlines; mitigate by moving corridor approx 300 m southeast of original location or to area beside COW tree nursery
Online Comment Sheet	n/a	x			proposed line going through marsh near property. Will disrupt ecosystem; does not want line there
Online Comment Sheet	n/a	x	x		Would like towers put up without destroying or clearing trees. Move the route to a more western route that is already open.
Hardcopy Comment Sheet	n/a		x		Suggest pre/post construction monitoring project with selected interested trappers; as previously suggested, a trapper workshop in fall 2015 in conjunction with Manitoba Trappers Association and local (southeastern) Wildlife Federation affiliates; suggest routing/construction activity notification to possibly *name provided* (fur harvester), North American fur auctions winnipeg and 4 wildlife federation locals in area of route; Stu supplied Trappers log book developed by MH.
Landowner Form	ALO 036	x			Route modification to move line off potential subdivisions
Phone Log	MLO 531; ALO 100	x			He requested a modification be considered at *QS provided* where 3 homes are now located in between both R49R and MMTP.
Phone Log	n/a		x		He requested that as we move forward he would like someone to come stake the location of the line so he can begin clearing the wooded area by himself as he is concerned about damages to the parcel.
Phone Log	MLO 003			x	Would prefer to see the towers in the same line as current towers on the property.
Phone Log	ALO 057	x			Hylife: the preferred route is right over top of their calving ridge. This area is extremely sensitive and they would prefer to see the line not cross the ridge.
Phone Log / Email	ALO 106	x			R3-LF006Z - Follow southern edge of WMA east for 1-2 QS, then south. Route along D602F. Emailed map to identify tower spotting. R3 -P039 - He indicated it was too close to his residence and that we should try and move the route more NE from current alignment to maximize separation. R3-E104 - Route modification attached to email.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Phone Log	-	x			He would prefer to see the route go 3km further south so it would not impact his view.
Phone Log	ALO 122	x			Landowner would like to see the preferred route moved to the west side of the current 230kv line so he could still build the home on his property.
Phone Log	ALO 120	x			Landowner indicated that if the preferred route were going to be on her property she would prefer it where it is now instead of on the west side of the 230kv line that is already crossing her property. One of the alternative routes in Round 2 was on the west side of the current 230kv on her property.
Phone Log	ALO 066			x	Indicated the best tower placement would be directly east of the home as the home as no east facing windows and the front of the home faces north.
Phone Log	ALO 042		x		Landowner wants to keep the lumber that is cleared from the RoW and also wanted to inform Manitoba Hydro he would like to see all the stumps removed from the RoW for a clean clear pathway on his property.
Stakeholder Meeting	Keystone Ag Producers		x		Consider three phase power and local distribution clearances as part of compensation.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Stakeholder Meeting	ALO 052	x			The landowners described a potential route adjustment: Road allowance 2 miles from the edge of the management area that appears to potentially be a better spot to route the line with less impact.
Stakeholder Meeting	ALO 052	x			The landowners made a suggestion to move the line to run through *QS provided* which is on crown land. Seems to be a trail right through this area. Suggestion to move line across this property.
Stakeholder Meeting	ALO 041	x			Owns 142 acres of *QS provided* and was held in pasture previously. Sand and Gravel deposits along the ridge that travels through the entire property. Current Preferred route located 1/3 mile through the property.
Stakeholder Meeting	Maple Leaf		x		Maple Leaf asked if they could suggest timing for construction (e.g., winter) and if there were restrictions for timing.
Stakeholder Meeting	Maple Leaf	x			The justification for the route mod is to move the preferred route from in between the two most sensitive barns to the west. There appear to be no major issues as it would all be crown land. The concern regarding the current preferred route is that there is a lot of movement between those two barns where the ROW would cut through causing major bio security issues. Also important to note is that they access those two barns from the south. They take a large berth around the barns to the west and access via the south to avoid any potential contamination from the numerous hog barns north of them.
Stakeholder Meeting	ALO 077	x			They would prefer not to see the line on their property but noted that if it were possible to shift slightly east and miximize distance from their home while not encroaching on their neighbours would be preferred.
Stakeholder Meeting	Pineland Colony	x			Modification to move line south within current QS. Will not split the ROW between two property owners and if moved will assist with drainage development plans.
iPad Data	-			x	Would not oppose having the angle structure located on their property.

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Phone & Email	ALO 138	x			ALO [138] suggested a route modification which was sent by email for confirmation on 02/04 at 12:15. TJ sketched the modification they were discussing over the phone and attached it to the email via a map.
Email	MLO 145		x		Provides information on where new trees could be planted to provide protection from the wind and a bit of a visual barrier between my property and the transmission lines. Would like to be involved in a planting design and the selection of a number of trees (of appreciable size, not seedlings) for this area.
Email	MLO 648	x			Route adjustment suggestion for *QS provided*. Map provided
Email	ALO 066			x	Would prefer tower placement directly east of their home. Map attached.
iPad Data	ALO 121	x			Would prefer to see the transmission line follow the existing transmission line. This would render the line to be in close proximity to the homes that re currently sandwiched between the two lines.
iPad Data	-	x			Route modification suggested by landowner. This will limit the impact from an agricultural and a visual concern.
iPad Data	ALO 080	x			Would prefer this alignment based on potential impact to operation. Would like to see this line follow the creek and have a tower in the swampy area.
iPad Data	ALO 035	x			Alignment would allow landowner to develop drains to highway 89
Landowner Form	R3-LF034L (ALO 078)	x		x	R3-LF034L (ALO 078) - Avoid treed areas on property to maintain park-like setting, move line to 1/4-section or place towers away from treed area. R3-CS004L (n/a) - Move line 1/2 mile further east near La Broquerie. R3-CS012L (n/a) - Would like the line moved 3 miles east, use other route (207).

Recommendations, Mitigation Measures and Tower Placement Recommendations Provided through all methods of Public Engagement

Method of Contact	ID# (MLO/ALO)	Type			Description
		Route Modification	Mitigation	Tower Spotting	
Landowner Form Landowner Form Hardcopy Comment Sheet Hardcopy Comment Sheet Hardcopy Comment Sheet Hardcopy Comment Sheet Hardcopy Comment Sheet Hardcopy Comment Sheet Online Comment Sheet Online Comment Sheet Stakeholder Meeting	R3-LF012L (MLO 108) R3-LF022L (MLO 614) R3-CS006L (n/a) R3-CS009L (n/a) R3-CS013L (n/a) R3-CS026L (n/a) R3-CS027L (n/a) R3-CS001D (n/a) 73924 (n/a) 76111 (n/a) MM - ALO 052 MM - RM of La Broquerie MM - RM of Piney MM - RM of Ste. Anne MM - RM of Ste. Anne MM - RM of La Broquerie MM - RM of Reynolds R3-E094 R3-E096 (MLO 258)	x			R3-LF012L (MLO 108) - Preference for segment 207, not adjacent to LaBroquerie. R3-LF022L (MLO 614) - Does not support segment through La Broquerie. R3-CS006L (n/a) - Line should be further east from LaBroquerie by at least 4-5 miles. R3-CS009L (n/a) - Move to inhabited areas 5 miles south. R3-CS013L (n/a) - Would like the line moved 3 miles east. To mitigate growth disorders in livestock industry, move line 6 miles east away from La Broquerie R3-CS026L (n/a) - To mitigate growth disorders in livestock industry, move line 6 miles east away from La Broquerie R3-CS027L (n/a) - Would like line close to fireguard #13 R3-CS001D (n/a) - Please use land further east into Sandilands 73924 (n/a) Cancer/EMF pollution concern, would like route to be moved east into non populated area 76111 (n/a) - Move like 2 miles east of school. MM ALO 053 - The landowners asked if fire guard 13 is being looked at for routing. MM RM of La Broquerie - The RM Council indicated there was no public support for segment 207 and cannot believe Manitoba Hydro would go against the clear direction of the community and not route the transmission line on the east side of the Watson P. Davidson Wildlife Management Area. MM RM of Piney - The RM Council indicated there was no public support for segment 207 and cannot believe Manitoba Hydro would go against the clear direction of the community and not route the transmission line on the east side of the Watson P. Davidson Wildlife Management Area. MM RM of Ste. Anne - RM Council does not understand the reasoning behind the choice of routing within close proximity to the Town of La Broquerie rather than the route on the east side of the Watson P. Davidson Wildlife Management Area. MM RM of Ste. Anne- The RM Council indicated the area south of Richer is the most unpalatable, as well as north of Richer. They would prefer to see Manitoba Hydro route the line down fireguard 13 all the way to the # 12 highway. This would make the most sense from our perspective. The RM Council indicated that the section of the route south of Richer would not have to be a huge adjustment; even 2km further east would be a huge adjustment for the region. Fireguard 13 needs to be reconsidered and the RM of Ste. Anne firmly believes Manitoba Hydro has dropped the ball on this project and will continue to be very displeased if nothing is changed. MM RM of La Broquerie - Petition recommending 207 vs. 208, signed by 200+ residents. MM RM of Reynolds - Letter stating RM preference to 207 route through the RM of Reynolds. R3-E094 - Ted Falk provided letter indicating preference over 207 to reduce impact on La Broquerie residents R3-E096 (MLO 258) - This route also cuts directly onto the corner air strip located in the curve south of richer on highway 302. There is also a sizeable recreational pilot group whom fly powered parachutes at much lower altitudes. Preference for 207.
Landowner Form Hardcopy Comment Sheet Hardcopy Comment Sheet Hardcopy Comment Sheet Hardcopy Comment Sheet Hardcopy Comment Sheet	R3-LF013L (MLO 055) R3-CS014L (n/a) R3-CS016L (n/a) R3-CS022L (n/a) R3-CS002A (MLO 010) R3-CS003A (ALO 016)	x	x		R3-LF013L (MLO 055) - Jog line further to east. R3-CS014L (n/a) - To mitigate impact on property value, environment and health concerns, move line 5 km east of LaBroquerie R3-CS016L (n/a) - To mitigate health concern, would like line to more further away into the field R3-CS022L (n/a) - To mitigate health concerns, quality of life, would like line moved 6 miles east to fire guard #13 R3-CS002A (MLO 010) - Centennial Farm and beef concerns, concerned about development of La Broquerie , move line 1/4 mile east. Identify "as per map" in CS, however no map was provided" R3-CS003A (ALO 016) - Concerned about crop and beef herd and EMF, Centennial Farm: Move land 1/8 mile east; half of the land is used for pasture, the rest agriculture