

**MANITOBA-MINNESOTA TRANSMISSION PROJECT ERRATA LIST**

March 17, 2017

ID#	EIS Chapter Name	EIS Chapter Number	Section or Page #	What EIS Currently Says (ERROR)	What EIS Should Say (CORRECTION)
1	Transmission Line Routing	5	Maps 5-5, 5-6, 5-7, 5-8 and 5-10	Only black areas on maps 5-5, 5-6, 5-7, 5-8 and 5-10 are noted as areas of least preference.	As explained at the Transmission Routing Workshop, both black and white areas on maps 5-5, 5-6, 5-7, 5-8 and 5-10 are areas of least preference.
2	Transmission Line Routing	5	Table 5-11	Weighted Natural Environment and total Scores for Routes TD, UC and UM are incorrect.	Weighted Environment (Natural) scores for TC, UC & UM should be 0.225, 0.113 & 0.075 respectively. The Total score for TC, UC & UM should be 1.2, 1.70 & 2.17 respectively. This was a typographical error. The resulting differences are negligible and do not alter the rankings. <b>See attached updated Table 5-11.</b>
3	Transmission Line Routing	5	Table 5-13	Title of Table 5-13 reads "Preference Determination, SLTC to Gardenton (showing relative scores, weighted scores and total sum; lower values are preferred for routing)"	Title of Table 5-13 should read "Routes Selected for Preference Determination, SLTC to Piney East"
4	Transmission Line Routing	5	Table 5-20	Under Risk to Schedule reads "Route EEL will require more private land acquisition than <b>EEL</b> and TC due ..."	Under Risk to Schedule should read "Route EEL will require more private land acquisition than <b>DKT</b> and TC due..."
5	Transmission Line Routing	5	Table 5-21	The weighted scores for Environment (Natural) are incorrect.	The weighted scores for Environment (Natural) should be 0.075, 0.112, 0.112 & 0.225. This was a typographical error. The correct values were used in the calculations and, as such, the Total and Rank are still accurate. <b>See attached updated Table 5-21.</b>
6	Transmission Line Routing	5	Table 5-29	SIL construction costs in Table 5-29 included structure payments whereas structure payment costs were not included in the other four routes.	<b>See attached updated Table 5-29</b> with the adjusted construction costs (all routes have structure costs included). The resulting difference is negligible and does not alter the rankings.
7	Transmission Line Routing	5	Table 5-28	Title of Table 5-28 reads " <b>Border Crossing</b> Preference Determination Scores and Rationale"	Title of Table 5-28 should read "Preference Determination Scores and Rationale"
8	Transmission Line Routing	5	Table 5-34	Under Community reads "BWZ However does mitigate concerns with the regarding the land of a private property owner that is of importance to members of the Roseau River Anishinabe First Nation"	Under Community should read "BWZ However does <b>NOT</b> mitigate concerns with the regarding the land of a private property owner that is of importance to members of the Roseau River Anishinabe First Nation" This was a typographical error. <b>See attached updated Table 5-34.</b>
9	Transmission Line Routing	5	Table 5-34	Under Community reads "Route BOB accommodates the concerns regarding the land of a private property owner that is of importance to members of the Roseau River Anishinabe First Nation."	This statement should be deleted as BOB does not accommodate the concerns. <b>See attached updated Table 5-34.</b>
10	Transmission Line Routing	5	Table 5A-9	Typographical error in table formatting in EIS: "Diagonal Crossings of Crop Land" is repeated under Criteria.	The first occurrence of "Diagonal Crossing of Crop Land" should be deleted, "Agricultural Crop Land" inserted above and the table shifted. <b>See attached updated Table 5A-9.</b>

**Table 5-11 Preference Determination, SLTC to Gardenton***(showing relative scores, weighted scores and total sum; lower values are preferred for routing)*

Criteria	Weight	Routes				
		SU	SY	TC	UC	UM
Cost <sup>1</sup>	40%	1.25	1.02	1	1.6	1.53
Weighted		0.5	0.41	0.40	0.64	0.61
System Reliability	10%	1	1	1	1	2
Weighted		0.1	0.1	0.1	0.1	0.2
Risk to Schedule	5%	1	1	2	2	3
Weighted		0.05	0.05	0.1	0.1	0.15
Environment (Natural)	7.5%	1.5	2	3	1.5	1
Weighted		0.113	0.15	0.225	0.113	0.075
Environment (Built)	7.5%	2.5	2	1	2	3
Weighted		0.19	0.15	0.075	0.15	0.23
Community	30%	1.5	1.75	1	2	3
Weighted		0.45	0.53	0.3	0.6	0.9
<b>TOTAL</b>		<b>1.40</b>	<b>1.39</b>	<b>1.20</b>	<b>1.70</b>	<b>2.17</b>
<b>RANK</b>		<b>3</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>5</b>

NOTE:

<sup>1</sup> A scaling factor was used to determine the relative score for each route.

**Table 5-21 Preference Determination for the Four Top Routes***(showing relative scores, weighted scores and total sum; lower values are preferred for routing)*

Criteria	Weight	Routes			
		TC	EEL	AQS	DKT
Cost <sup>1</sup>	40%	1	2.2	1.4	1.5
Weighted		0.40	0.88	0.56	0.60
System Reliability	10%	1	1	1	2.5
Weighted		0.1	0.1	0.1	0.25
Risk to Schedule	5%	1	2	1.5	3
Weighted		0.05	0.1	0.075	0.15
Environment (natural)	7.5%	1	1.5	1.5	3
Weighted		0.075	0.112	0.112	0.225
Environment (built)	7.5%	2.75	3	2.5	1
Weighted		0.21	0.23	0.19	0.075
Community	30%	1	2	1	1
Weighted		0.3	0.6	0.3	0.3
<b>TOTAL</b>	<b>100%</b>	<b>1.13</b>	<b>2.02</b>	<b>1.34</b>	<b>1.60</b>
<b>RANK</b>		<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>

NOTE:

<sup>1</sup> A scaling factor was used to determine the relative score for each route.

**Table 5-29 Round 2 Preference Determination for the Preferred Route for MMTP***(showing relative scores, weighted scores and total sum; lower values are preferred for routing)*

Criteria	Weight	Routes				
		URV	SIL	AY	URQ	SGZ
Cost <sup>1</sup>	40%	1.02	1.04	1.06	1.04	1
Weighted		0.41	0.42	0.42	0.42	0.40
System Reliability	10%	1	1.5	1.5	1	1
Weighted		0.1	0.15	0.15	0.1	0.1
Risk to Schedule	5%	1	1	2	1	2
Weighted		0.05	0.05	0.1	0.05	0.1
Environment (natural)	7.50%	1.2	2.2	3	1	2.7
Weighted		0.09	0.17	0.23	0.075	0.20
Environment (built)	7.50%	3	2.7	1	3	2
Weighted		0.23	0.20	0.075	0.23	0.15
Community	30%	2	1	2	3	3
Weighted		0.6	0.3	0.6	0.9	0.9
<b>TOTAL</b>		<b>1.47</b>	<b>1.28</b>	<b>1.57</b>	<b>1.77</b>	<b>1.85</b>
<b>RANK</b>		<b>2</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>

NOTE:  
<sup>1</sup> A scaling factor was used for cost.

**Table 5-34 Preferred Route Preference Determination Scores and Rationale**

<b>Criteria</b>	<b>Route</b>	<b>Scores</b>	<b>Rationale</b>
Cost	BMX	1	A scaling factor was used to calculate the scores based on estimates for the total Project costs. BWX and BXP have a slightly higher cost driven primarily by the longer lengths of these route alternatives.
	BWZ	1.02	
	BXP	1.02	
	BMY	1	
	BOB	1	
System Reliability	BMX	1	The eastern routes (BWZ and BXP) are slightly longer (extra line length increases the risk) and closer to M602F.
	BWZ	1.5	
	BXP	1.5	
	BMY	1	
	BOB	1	
Risk to Schedule	BMX	1.5	The eastern routes (BWZ and BXP) have a higher prevalence of Crown land. The eastern routes (BWZ and BXP) traverse more wetlands (seasonal construction issues). The Maple Leaf Foods livestock operation has requested winter construction if the route remained in proximity to their facility, which could result in a scheduling, and construction delay (BXP).  Route BMY ranks highest from a community perspective because it addresses many concerns heard from the RM of La Broquerie, Maple Leaf Foods, Sundown Cemetery, Hylife, the recreational area, and First Nations.
	BWZ	2.5	
	BXP	3	
	BMY	1	
	BOB	1.5	
Environment (natural)	BMX	1.5	Route BMY is preferred because it avoids a large amount of forest and introduces less habitat fragmentation, avoids critical habitat for a number of species and endangered species. Route BMY also allows for mitigation of potential effect on the culturally important area.  Route BOB is slightly less preferred than route BMY as it crosses a culturally sensitive area.  Route BXP is least preferred because it fragments forested areas and critical habitat
	BWZ	2.8	
	BXP	3	
	BMY	1	
	BOB	1.2	
Environment (natural) (continued)			Route BWZ is slightly preferred to BXP because it provides a larger buffer between the route and the Watson P. Davidson WMA and avoids some wetlands.  Route BMX goes over the southern edge of Lonesand Lake, therefore is slightly less preferred than Route BOB.
Environment (built)	BMX	2.9	Route BWZ is the preferred route as it avoids the town of La Broquerie, proposed residential developments and privately owned agricultural lands. Route BXP ranks slightly lower than Route BWZ because it avoids the Maple Leaf Foods operations.  Route BOB is a little closer to the cemetery therefore it scores the lowest. Route BMY scores the same as BOB there is little difference between these routes from a built
	BWZ	1	
	BXP	1.1	
	BMY	3	
	BOB	3	

Criteria	Route	Scores	Rationale
			perspective.
Community	BMX	2.5	<p>The highest rank was given to the route(s) that best balances the overall concerns.</p> <p>Route BWZ ranks highest from the PEP perspective because it avoids the private recreational area, the Maple Leaf Foods operation and uses the easternmost segment, mitigating the concerns related to residential development in and around the Town of La Broquerie.</p> <p>The Hylife concerns relating to their calving grounds are mitigable with the use of self-supporting towers with protected bases.</p> <p>BWZ However does <b>not</b> mitigate concerns regarding the land of a private property owner that is of importance to members of the Roseau River Anishinabe First Nation</p> <p>Route BWZ ranks lowest from the FNMEP perspective: It will cause more Crown land fragmentation and affect historical and contemporary use.</p> <p>It creates Archeology concerns (effect on areas identified as potential to contain heritage resources) and greater access to sensitive areas farther east.</p> <p>Route BMY ranks highest from the FNMEP perspective.</p> <p>Route BMY does not address the Town of La Broquerie concerns but accommodates concerns heard from private landowners and livestock operators located within the RM of La Broquerie and the RM of Stuartburn (Hylife, Maple Leaf, recreational lands, Sundown Cemetery and the land of a private property owner that is of importance to members of the Roseau River Anishinabe First Nation.</p>
	BWZ	2	
	BXP	2.5	
	BMY	1	
	BOB	2	

Table 5A-9 Alternate Route Evaluation Model

<b>Criteria</b>	<b>Weight</b>
<b>Built</b>	
Relocated Residences – Within ROW	35.3%
Potential Relocated Residences (100 m) – Edge of ROW	19.1%
Proximity to Residences (100-400 m) – Edge of ROW	6.4%
Proposed Developments – Within ROW	1.1%
Agricultural Crop Land	2.6%
Irrigated Land (Acres) – ROW	6.5%
Shelter Belts (Acres) – ROW	2.5%
Diagonal Crossings of Agriculture Crop Land (km)	6.7%
Proximity to Buildings and Structures (100 m) – EOROW	1.3%
Public Use Areas (250m) – EOROW	1.1%
Historic/Cultural Resources (250 m) – Edge of ROW	10.1%
Potential Commercial Forest (Acres) – ROW	7.3%
<b>Natural</b>	
Natural Forests (Acres) – ROW	4.4%
Stream/River Crossings – Centerline	1.7%
Wetland Areas (Acres) – ROW	11.2%
High Quality Wildlife Habitat (Acres) – ROW	15.6%
Floodplain/Riparian Areas (Acres) – ROW	8.0%
Special Areas (e.g., ASI, Proposed Protected Areas)	27.5%
Native Grassland Areas (Acres) – ROW	31.7%
<b>Engineering</b>	
% Parallel Existing T/L	8.2%
% Parallel Roads	8.2%
% Rebuild Existing T/L (e.g., Reconductor, Double Circuit)	24.6%
Length in Separation Buffer (Km)	37.1%
Existing Transmission Line Crossings (#)	3.8%
Accessibility	15.2%
<b>Total Project Costs</b>	<b>2.9%</b>