

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Appendix 5C**

QUESTION:

What are the biases that affected the evaluation of the possible routes during the workshop?

RESPONSE:

- 1 Please refer to response SSC-IR-056.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Appendix 5C**

QUESTION:

What training was provided by Manitoba Hydro to the participants to deal with these biases?

RESPONSE:

- 1 Please refer to response SSC-IR-056.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Appendix 5C**

QUESTION:

What policies, procedures and/or protocols were in place to address biases that affected the evaluation of the possible routes during the workshop?

RESPONSE:

- 1 Please refer to response SSC-IR-056.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Appendix 5C**

QUESTION:

What steps are taken by Manitoba Hydro after the evaluation of the possible routes during the workshop to determine whether or not biases affected some or all of conclusions reached?

RESPONSE:

- 1 Please refer to response SSC-IR-056.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Appendix 5C**

QUESTION:

What direct or indirect instructions, if any, were participants in the workshop given by Manitoba Hydro to intentionally exclude DKT and BZG?

RESPONSE:

- 1 No instructions, direct or indirect, were given to workshop participants to intentionally exclude
- 2 any routes, including DKT and BZG.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.4.3.1 and Appendix 5C

QUESTION:

Please provide all internal Manitoba Hydro communications and documentation relating to the development and subsequent exclusion of routes DKT and BZG.

RESPONSE:

- 1 The documentation related to the routing decisions associated with DKT and BZG are provided
- 2 with the EIS. DKT and BZG were routes considered in Round 1, and the information pertinent to
- 3 their removal is presented in Chapter 5 of the EIS and Appendix 5C.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Appendix 5C**

QUESTION:

Why did Manitoba Hydro decide to allow the senior managers from the Transmission Business Unit to select the criteria and weighting of those criteria?

RESPONSE:

- 1 Because accountability of transmission projects rests with this particular Management Team,
- 2 their input into high level evaluation criteria and weightings was necessary.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Table 5-9**

QUESTION:

Who are the senior managers from the Transmission Business Unit that were involved in the selection of the criteria and weighting of those criteria?

RESPONSE:

- 1 The senior managers involved in the selection of the criteria and weighting of the Preference
- 2 Determination Model are referred to as the 'Management Team'. Information related to
- 3 members of the Management Team is provided in CEC-IR-013.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Table 5-9**

QUESTION:

What other involvement did the senior managers from the Transmission Business Unit have in the route selection process for the Manitoba-Minnesota Transmission Project?

RESPONSE:

- 1 Senior managers (Management team) had no other significant involvement in the route
- 2 selection process for the Manitoba-Minnesota Transmission Project other than what is
- 3 described in Chapter 5 of the EIS.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Table 5-9**

QUESTION:

Did the senior managers from the Transmissions Business Unit consult with other senior Manitoba Hydro employees and, if so, who and why?

RESPONSE:

- 1 Senior managers from the Transmission Business Unit routinely consult with other senior
- 2 Manitoba Hydro employees for a variety of reasons, but did not consult outside of the
- 3 Transmission Business Unit for the Preference Determination Model.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Table 5-9**

QUESTION:

Did the senior managers from the Transmissions Business Unit consult with any members of the Manitoba Hydro Board of Directors and, if so, who and why?

RESPONSE:

- 1 Assuming the question refers to the role of the Management Team in setting the criteria and
- 2 weightings for the Preference Determination Model - No, they did not consult with the
- 3 Manitoba Hydro Board of Directors.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.4.3.1 and Table 5-9

QUESTION:

Please provide an explanation on how the “high-level construction cost estimates” referred to in the Cost criteria were prepared.

RESPONSE:

- 1 Table 5-9 presents the preference determination criteria for the Project. In preference
- 2 determination, the relative difference between routes using the cost criteria is determined by
- 3 first considering the construction cost estimates from the AREM model. Additional
- 4 considerations can be added with more specific consideration of the route finalists at this stage.
- 5 Please refer to response SSC-IR-252.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.4.3.1 and Table 5-9

QUESTION:

Please provide the “high-level construction cost estimates” for each of routes SU, SY, TC, UC, UM, DKT, EEL, FWZ, DWM, BZG, AQS and AQO.

RESPONSE:

- 1 The “high level construction cost estimates” are those (Second last line – “Total Project Costs”)
- 2 provided in:
 - 3 • Table 5-7, page 5-35, for Routes SU, SY, TC, UC, and UM;
 - 4 • Table 5-12, page 5-43, for Routes DKT, DWM, EEL, and FWZ; and
 - 5 • Table 5-16, page 5-51, for Routes BZG, AQS, and AQO.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.4.3.1 and Table 5-9

QUESTION:

Please provide a complete list of all risks included in the Schedule Risks criteria.

RESPONSE:

1 The Schedule Risks criteria in the Preference Determination Model receives a 5% weighting and
2 is described in Table 5-9 as including “consideration of the need for additional approvals,
3 seasonality of construction, overall level of complication expected that could result in delays”
4 The factors that further inform these considerations include:

- 5 • land acquisition;
- 6 • transmission line crossings;
- 7 • accessibility and seasonal construction issues; migratory bird timing restrictions; and
- 8 • other approvals.

9 In each round of preference determination, subsets of routes are compared against each other
10 and the relative differences across each of the criteria considered are captured with a ranking
11 between 1-3. Therefore, if all the routes considered had similar transmission line crossings and
12 no accessibility issues, the ranks for schedule risk would be driven by those factors that were
13 different across routes, which would be seasonal construction issues, land acquisition and other
14 approvals in this example. The documentation of the rationale for the rankings provided in the
15 preference determination step in Chapter 5 focuses on highlighting these differences.

16 The general consideration of these factors can be described as follows:

17 For **land acquisition** – routes with higher amounts of private land, higher numbers of homes,
18 and higher proportions of landowners where it is anticipated that expropriation could be
19 required are considered a greater risk to schedule than those with lower values.

20 For **transmission line crossings** – routes with a higher total number of crossings and a higher
21 proportion of crossings with high voltage lines, or export lines have more complex outage
22 scheduling considerations and are considered a greater risk to schedule.

23 For **accessibility and seasonal construction issues** – in general, routes with more features that
24 require specific timing requirements or constraints on construction activities have a higher risk
25 to schedule (ex. wetlands with no road access can require winter only construction, heavily
26 forested areas with known nesting birds have timing restrictions on construction)

27 For **other approvals** - routes that have more Crown land can trigger interests from a variety of
28 different departments in the government and increase the need for other approvals or
29 influence the duration and level of effort required in those processes have a greater risk to
30 schedule.

31 In applying these considerations, the team shared in a discussion of all the factors that were
32 relevant and determined the relative schedule risk overall for each route.

33 With respect to the relative risk to schedule associated with private land versus the Crown
34 lands, the team considered the time and approvals associated with each type of land tenure
35 and the potential of each to influence the start of construction. The government must satisfy
36 itself with interests and concerns regarding Crown lands. For example, the Province must be
37 comfortable with the sufficiency of its Crown Consultation process prior to Manitoba Hydro
38 being issued an *Environment Act* Licence for the Project, whereas a Licence can be issued prior
39 to the acquisition of private land. Hence, the team determined that routes with higher
40 proportions of Crown land had a greater risk to schedule.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.1 and Table 5-9**

QUESTION:

If the provincial government does not exercise the power under section 9(8) of the Expropriation Act to take away the rights of objecting landowners to object to proposed expropriations and participate in inquiries, how does that affect the Schedule Risks scores of each of routes SU, SY, TC, UC, UM, DKT, EEL, FWZ, DWM, BZG, AQS and AQO?

RESPONSE:

- 1 The EPRI-GTC methodology does not directly or indirectly take into account the time and cost
- 2 associated with expropriation objections and inquiries.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.4.3.1 and Table 5-9

QUESTION:

The System Reliability criteria refers to proximity to existing 500 kV lines and crossing high voltage transmission lines. The rationale for each of the routes generally refer to “transmission lines” without specifying whether they otherwise satisfy this criteria. Please advise what is meant by “high voltage” in this context, whether proximity to lines other than existing 500 kV lines and/or crossing non-“high voltage” lines were considered for any of routes SU, SY, TC, UC, UM, DKT, EEL, FWZ, DWM, BZG, AQS and AQO.

RESPONSE:

- 1 Manitoba Hydro considers transmission lines having a voltage rating of 115-kV or higher as
- 2 “high voltage”.

- 3 Manitoba Hydro did not consider the proximity of lines other than existing 500-kV, or the
- 4 crossing of non- “high voltage” lines, for the routes SU, SY, TC, UC, UM, DKT, EEL, FWZ, DWM,
- 5 BZG, AQS and AQO in the “System Reliability” criteria.

SUBJECT AREA: Routing, Assessment

REFERENCE: EIS, Chapter 5, section 5.4.3.4

QUESTION:

Did Manitoba Hydro engage in the “appropriate assessment of the effect on ecological, traditional or cultural values of those lands” before it eliminated Piney East?

RESPONSE:

- 1 The phrase in quotations refers to the non-licensing recommendation #7.4 from the Clean
- 2 Environment Commission Report on the Bipole III Project that indicates that “*Manitoba Hydro*
- 3 *discontinue using undeveloped Crown land as a default routing option without appropriate*
- 4 *assessment of the impact on ecological, traditional or cultural values of those lands.*”
- 5 Manitoba Hydro gathered appropriate information and conducted appropriate analysis to
- 6 remove Piney East from further consideration at this stage of transmission line routing.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.4.3.4**

QUESTION:

Did Manitoba Hydro eliminate Piney East because it was unwilling to engage in the “appropriate assessment of the effect on ecological, traditional or cultural values of those lands”?

RESPONSE:

- 1 Please refer to response SSC-IR-119.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5**

QUESTION:

If the Clean Environment Commission rejects Manitoba Hydro's selection of route AQS as the route that should have proceeded to Round 2, how long would it take Manitoba Hydro to re-do Rounds 2 and 3 and at what cost?

RESPONSE:

- 1 The decision on licensing is that of the provincial and federal governments and Manitoba Hydro
- 2 will abide by the decision of regulators.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5**

QUESTION:

If the Clean Environment Commission rejects Manitoba Hydro's selection of route AQS as the route that should proceed to Round 2, will Manitoba Hydro still proceed with the Manitoba-Minnesota Transmission Project? If not, why not and what are the financial consequences (if any) of not proceeding?

RESPONSE:

- 1 Manitoba Hydro will only proceed with the project upon approval of the provincial and federal
- 2 governments.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5**

QUESTION:

When did Manitoba Hydro and Minnesota Power reach an agreement to shift the border crossing approximately 6.4 km eastward?

RESPONSE:

- 1 Manitoba Hydro and Minnesota Power reached an agreement to shift the border crossing
- 2 approximately 6.4 km eastward in October of 2014.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5**

QUESTION:

How close is the new more easterly border crossing to the end point of route BZG?

RESPONSE:

- 1 The new more easterly border crossing is approximately 2.3km east of the end point of Route
- 2 BZG.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5

QUESTION:

Did Manitoba Hydro consider how the new more easterly border crossing may have changed the respective scores of routes AQS and BZG? If not, why not?

RESPONSE:

- 1 The objective of Round 1 was to select and negotiate a border crossing for the Project. The
- 2 adjustment to the selected and negotiated border crossing occurred after this decision was
- 3 made. Manitoba Hydro did not go back to consider how the shift to the border crossing would
- 4 have changed scores for routes AQS and BZG. Rather, the change to the border crossing point
- 5 was captured in the Round 2 route evaluation process as outlined on page 5-71.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

Section 5.5.4 states that the Round 2 route selection workshop was conducted on November 17 – 18, 2014. The meeting notes for the workshop at Appendix 5D indicate that the workshop took place on February 17 – 18, 2014. Which is incorrect?

RESPONSE:

- 1 The Round 2 route selection workshop was conducted on November 17-18, 2014. The date on
- 2 the meetings notes is incorrect.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

How did Manitoba Hydro decide who should be invited to the workshop?

RESPONSE:

- 1 Please refer to response SSC-IR-082.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

Why did Manitoba Hydro decide to not invite members of the public?

RESPONSE:

- 1 Please refer to response SSC-IR-083.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

For each of the Manitoba Hydro attendees listed in Appendix 5D, please provide their job title and identify which perspective they represented.

RESPONSE:

- 1 This question is referring to the participants in the Round 2 Routing Workshop. The table below
 2 provides the list of attendees and their associated titles. With respect to which specific
 3 perspectives they represented, this varied. While participants certainly spoke the perspectives
 4 most closely related to their area of expertise, they also contributed to discussions related to
 5 other perspectives as well. Additional details related to general workshop dynamics can be
 6 found in Manitoba Hydro's response to SSC-IR-090.

ROUND 2 ROUTING WORKSHOP ATTENDEES		
NAME	TITLE/DISCIPLINE	COMPANY/GROUP
James Matthewson	Senior Environmental Assessment Officer	Manitoba Hydro, Licensing and Environmental Assessment Department
Dave Block	Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
Richard Goulet	Community Relations Advisor	Manitoba Hydro, Indigenous Relations
Maria M'lot	Community Relations Advisor	Manitoba Hydro, Indigenous Relations
Jon Kell	Civil Design Section Head	Manitoba Hydro, Transmission and Civil Design Department

ROUND 2 ROUTING WORKSHOP ATTENDEES		
NAME	TITLE/DISCIPLINE	COMPANY/GROUP
Trevor Joyal	Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
Brett McGurk	Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
Maggie Tisdale	Senior Environmental Assessment Officer	Manitoba Hydro, Licensing and Environmental Assessment Department
Robin Gislason	Engagement Coordinator	Manitoba Hydro, Licensing and Environmental Assessment Department
Lindsay Thompson	Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
Sarah Coughlin	Senior Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
Amna Mackin	Project Manager	Manitoba Hydro, Transmission Projects Department
Shannon Johnson	Manager	Manitoba Hydro, Licensing and Environmental Assessment Department
Rob Kalichuk	Technical Assistant	Manitoba, Transmission Line and Civil Design Department
Andrea Almeida	Project Manager	Manitoba Hydro, Transmission Projects
Janet Mayor	Legal Counsel	Manitoba Hydro, Law
Doug Bedford	Legal Counsel	Manitoba Hydro, Law

ROUND 2 ROUTING WORKSHOP ATTENDEES		
NAME	TITLE/DISCIPLINE	COMPANY/GROUP
Monica Dominguez	Community Relations Advisor	Manitoba Hydro, Indigenous Relations
Natalie Henault	Public Engagement	AECOM
Jesse Glasgow	Routing	Quantum Spatial
Patrick Baber	Routing	Quantum Spatial
Dave Whetter	Socioeconomic Assessment	Stantec
Leane Wyenberg	Biophysical Assessment	Stantec
George Kroupa	GIS	Stantec
Glenda Samuelson	Biophysical Assessment	Stantec
Bill Krawchuk	Socioeconomic Assessment	Stantec
Frank Bohlken	Socioeconomic Assessment	Stantec
Carmen Anseeuw	Project Coordinator	Stantec
Dave McLeod	Heritage	Stantec
Butch Amundson	Aboriginal, Traditional Knowledge	Stantec
Marcel Gahbauer	Biophysical Assessment	Stantec
Lisa Peters	Biophysical Assessment	Stantec
Sarah Garner	GIS	Stantec
Evan Rogers	GIS	Stantec
Vince Keenan	Forestry	Maskwa Ecological
Brian Ward	Socioeconomic Assessment	MMM
Bob Brown	Socioeconomic Assessment	MMM

7

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

Why did a representative from Quantum Spatial facilitate the workshop?

RESPONSE:

- 1 Please refer to response SSC-IR-085.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

What are Maskwa and MMM?

RESPONSE:

- 1 Maskwa refers to the consulting firm Maskwa Ecological Consulting Inc.
- 2 MMM refers to the consulting firm MMM Group Ltd.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

Does Manitoba Hydro now have a compensation policy for developers for the loss of lots and, if so, what is it?

RESPONSE:

- 1 No, Manitoba Hydro does not have such a compensation policy. However, Manitoba Hydro will
- 2 discuss individual landholdings with potentially affected landowners to determine loss and
- 3 appropriate compensation, if any.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

What is meant by “Buy-out has effective mitigation, adjacent homes no ‘effective’ mitigation”?

RESPONSE:

- 1 The above comment was quoted from high-level meeting notes for the February 17/18, 2014,
- 2 route selection workshop and was in reference to the various policies related to landowner
- 3 compensation and the perceived effectiveness of these to address landowners concerns.
- 4 (Appendix 5D).

- 5 As per Manitoba Hydro policy, mitigation may be provided to landowners in the form of a
- 6 voluntarily buy-out if the home is located within 75m to the cross-arm of a tower, on a case by
- 7 case basis (please see response SSC-IR-225). For those properties that are traversed by the
- 8 transmission line further compensation in the form of an easement is also applied.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

Why are there no data sets for conservation easements on private property?

RESPONSE:

1 Conservation easements could have been brought forward by landowners who had one issued
2 on their property. Landowners were provided the opportunity to share all aspects of their
3 property and landholdings throughout Round 3 in meetings, public events or phone/email.

4 Manitoba Hydro has worked with conservation agencies to identify areas of conservation
5 concern for consideration in decision making.

6 The Seine-Rat River Conservation District provided Manitoba Hydro a letter outlining a
7 conservation easement on a piece of private property. This location was considered in the route
8 selection process and the associated segment is not part of the Final Preferred Route.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

What is meant by “More crown land more risk to schedule”?

RESPONSE:

- 1 Please refer to responses SSC-IR-102 and SSC-IR-116.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What is a pseudo-quantitative analysis?

RESPONSE:

- 1 The term “pseudo-quantitative analysis” was used in a workshop discussion and recorded in the
- 2 Built perspective Breakout group notes summary in Appendix 5D.
- 3 The recording of the term was not intended to describe a specific analysis methodology, it was
- 4 an “off the cuff” description by a participant that was simply captured in the group notes as a
- 5 reminder of the discussion and review of the statistics that was being completed at the time.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What is specialty mitigation (aka special mitigation)?

RESPONSE:

- 1 Specialty mitigation is referred to in Section 5 page 5-88 in regards to applying an estimated
- 2 cost to each route for use in the Engineering Perspective of the Preference Determination
- 3 Model. Specialty mitigation is also referred to in the Routing Workshop meeting minutes from
- 4 February 18, 2014 in reference to the additional costs associated with specialty structures
- 5 needed to address potential effects at the planned Highway 207 interchange.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What does the “project costs” of \$500,000 (in fees etc.) and \$500,000 for property to buyout represent and how were those figures calculated?

RESPONSE:

- 1 These represent statements made by a participant in the meeting regarding the upper end of
- 2 estimated potential costs for purchasing a property within the proposed ROW and the fees that
- 3 could be associated with these purchases. This is not intended to be a specific representation of
- 4 the costs to mitigate or compensate for land uses.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What “issues” would CN have with 500 kV line along the CN Main Line? Specifically, what impact does a 500kV transmission line have on railway signaling?

RESPONSE:

- 1 When building a transmission line along the railway, interference studies will be conducted to ensure
- 2 the public safety and to determine railway equipment susceptibility. In general, two scenarios need to
- 3 be examined.
 - 4 1. Steady state load condition
 - 5 • Inductive Interference
 - 6 • Capacitive Interference
 - 7 2. Fault Condition
 - 8 • Inductive Interference
 - 9 • Capacitive Interference
 - 10 • Conductive Interference
- 11 Under steady state load condition, both inductive and capacitive interference are highly dependent on
- 12 the separation distance between railway and parallel transmission line. The inductive and capacitive
- 13 interference becomes negligible once the separation distance is larger than 1 km. This is the distance
- 14 preferred by railway companies for siting any potential transmission line along the railway.
- 15 If the separation distance between railway and transmission line is less than 1km, the above
- 16 interference studies under steady state load condition shall be conducted to ensure the following design
- 17 criteria:

-
- 18 • Rail Ground Potential Rise Along the Rail Tracks: <25V
- 19 • Touch Voltage on Rail Tracks: IEEE Safety Criteria - IEEE Standard 80-2013 (50kg body weight)
- 20 • Rail-to-Rail Voltage on Equipment: Equipment Susceptibility (3-12V)
- 21 • Voltage Across The Insulating Joint: < 50V

22 If the separation distance between railway and transmission line is even closer (100m or less), the fault
23 condition shall be considered in this case as conductive interference and will be the dominant factor.

24 The following design criteria shall be examined:

- 25 • Touch and Step Voltage on the Rail Track: IEEE Safety Criteria - IEEE Standard 80-2013 (50kg
26 body weight)
- 27 • Longitudinal Current on the Rail Track: Arrestor Rating
- 28 • Rail-to-Ground Potential: >2000V

29 ***Railway Signaling***

30 The electromagnetic phenomena that can damage railroad signal equipment fall into one of the
31 following two categories:

32 1. Anything which raises the rail-to-ground potential significantly above the 2000 Volt insulation
33 breakdown requirement of AREMA 11.5.1 (Note: this should also be enough to trigger the primary surge
34 protection devices, a.k.a. "lightning arresters".)

35 2. Anything which raises the rail-to-rail potential enough to produce power levels within components
36 used in the signaling equipment which exceeds their power ratings

37 Damage, as the result of exposures in both categories, will be prevented by conducting electromagnetic
38 studies as mentioned above and applying the mitigation if required.

SUBJECT AREA: Routing, Property

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What does “Private land \$115,000 / km, \$30,000 / km for crown” mean?

RESPONSE:

- 1 For a comparative evaluation of the respective routes, Manitoba Hydro uses a high level, broad
- 2 estimate of the market value of private land versus crown lands. This number was provided
- 3 solely for a comparison of high grade farm land values versus Crown Land values.
- 4 Compensation for each private landowner will vary on an individual basis as there are many
- 5 factors that determine each individual property value. These factors will be applied to all land
- 6 classes and will differ from property to property.

SUBJECT AREA: Routing, First Nation and Metis Engagement

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What is meant by “Property issues (risk of expropriation – partially mitigated)”?

RESPONSE:

- 1 The question refers to the notes from the Round 2 Route Evaluation workshop, and the
- 2 consideration of factors that could influence Risk to Schedule. Please refer to response SSC-IR-
- 3 116.

- 4 Through the public engagement process during Round 2, a few landowners indicated to
- 5 Manitoba Hydro that expropriation may be required if the project were to cross their property.
- 6 In certain areas where there is a higher proportion of landowners who expressed resistance to
- 7 the Project, it was assumed it could be more difficult to obtain easements. “Partially mitigated”
- 8 means there were portions of the routes under consideration where the level of resistance
- 9 expressed was less. Chapter 5, page 5-90, under the heading “Community” further describes
- 10 the consideration of private land acquisition and risk to schedule.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

Which rural municipalities expressed potential opposition to routes through highly populated areas, and why?

RESPONSE:

1 Rural municipalities have been involved in the public engagement process since the onset of
2 the project. They have shared information about development, shared concerns of their
3 constituents that they are elected to represent, and concerns of the Council. Avoidance of
4 residences and development was considered important to those who participated in the
5 engagement process and was factored into the transmission line routing process. The
6 municipalities of Springfield, Tache, Ste.Anne and La Broquerie have shared concerns that
7 focused on the proximity of the transmission line to residences.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

Why would Manitoba Hydro “anticipate lack of further buy-in for remainder of project, delaying future deliverables and EIS review” if route AY is selected?

RESPONSE:

1 The question refers to the notes from the Round 2 route evaluation workshop, specifically the
2 notes from the Community Breakout group. (EIS, Chapter 5, section 5.5.4 and Appendix 5D).

3 These meeting notes document the discussions held with the PEP and FNMEP teams that
4 informed the rankings of routes as part of the preference determination process. During these
5 discussions, teams considered feedback received on segments/routes that were presented
6 through the engagement processes. For segments that were not previously presented to the
7 public and Indigenous communities (i.e. mitigative segments), the teams considered relevant
8 feedback and their knowledge of the area in question. In order to build a full, shared
9 understanding amongst teams of the feedback received, advantages and risks were discussed.

10 Not all of these concerns brought up during meeting discussions directly influenced the ranking
11 assigned to a route in preference determination, as it is the relative difference between routes
12 that is reflected in these rankings.

13 Table 5-29 summarizes the outcome of the Round 2 Route Selection Workshop and illustrates
14 the relative differences between route preferences based on the criteria. Route AY was
15 considered less preferred from a cost, system reliability, risk to schedule, environment (natural)
16 and a community perspective and ultimately was ranked third overall out of the five routes
17 considered.

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 ¹	40%	1.01	1.14	1.05	1.03	1
Weighted		0.40	0.46	0.42	0.41	0.4
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
TOTAL		1.47	1.32	1.57	1.76	1.85
RANK		2	1	3	4	5

NOTE:
¹ A scaling factor was used for cost.

18

19 The statement quoted in the question was made by Manitoba Hydro representatives as they
20 anticipated substantial concerns would be raised from FNMEP communities should this route
21 be selected. Swan Lake First Nation, Long Plain First Nation and Black River First Nation had
22 recently expressed frustration regarding a border crossing amendment. These same three First
23 Nations had just submitted a preliminary report the morning of the routing workshop. This
24 report did not focus on the area traversed by the AY segment. Manitoba Hydro staff
25 contemplated that because of the recent frustrations expressed by these communities
26 regarding the border crossing amendment, similar frustrations may occur if new routes were
27 introduced to the process at this stage of project planning. This new route segment might cause
28 a lack of buy-in and potentially delay further engagement activities for the remainder of the
29 project.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

Why would the “responsiveness and legitimacy” be harder to defend?

RESPONSE:

- 1 The question refers to the notes from the Round 2 route evaluation workshop, specifically the
- 2 notes from the Community Breakout group (EIS, Chapter 5, section 5.5.4 and Appendix 5D).
- 3 Please refer to response to SSC-IR-143. Route AY was considered less preferred from a cost,
- 4 system reliability, risk to schedule, environment (natural) or a community perspective and
- 5 ultimately was ranked third overall out of the five routes considered.
- 6 The sentence quoted above relate to concerns shared by the FNMEP team surrounding the
- 7 potential response from specific communities should this route be selected. Based on the
- 8 understanding that there was existing concerns in the area, it was contemplated that should
- 9 this route be selected that First Nations might feel that their concerns about the area had not
- 10 been considered by Manitoba Hydro; therefore, the “responsiveness and legitimacy” of the
- 11 engagement process would be questioned by First Nation communities.

SUBJECT AREA: Routing, First Nation and Metis Engagement

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

Does Manitoba Hydro believe that Aboriginal engagement with the National Energy Board would not be “timely, accessible, responsive and inclusive” if route AY is selected and, if so, why?

RESPONSE:

- 1 The question refers to the notes from the Round 2 route evaluation workshop, specifically the
- 2 notes from the Community Breakout group (EIS, Chapter 5, section 5.5.4 and Appendix 5D).
- 3 Please refer to response SSC-IR-143. Route AY was considered less preferred from a cost,
- 4 system reliability, risk to schedule, environment (natural) and a community perspective and
- 5 ultimately was ranked third overall out of the five routes considered.
- 6 The quote from the meeting notes is “NEB requires Aboriginal engagement that is timely,
- 7 accessible, responsive and inclusive.” The sentence quoted above relates to concerns shared by
- 8 the FNMEP team surrounding the potential response from specific communities should this
- 9 route be selected. Based on the understanding that there was existing concerns in the area, it
- 10 was contemplated that should this route be selected First Nation communities might feel that
- 11 Manitoba Hydro’s engagement process had not been timely, accessible, responsive and
- 12 inclusive to their concerns, which is required by the National Energy Board.

SUBJECT AREA: Routing, First Nation and Metis Engagement

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What is meant by “increased potential for FNs intervener presence”?

RESPONSE:

- 1 The question refers to the notes from the Round 2 route evaluation workshop, specifically the
- 2 notes from the Community Breakout group (EIS, Chapter 5, section 5.5.4 and Appendix 5D).
- 3 Please refer to response SSC-IR-143. Route AY was considered less preferred from a cost,
- 4 system reliability, risk to schedule, environment (natural) or a community perspective and
- 5 ultimately was ranked third overall out of the five routes considered.
- 6 The sentence quoted above relate to concerns shared by the FNMEP team surrounding the
- 7 potential response from specific communities should this route be selected. Based on the
- 8 understanding that there was existing concerns in the area, it was contemplated that should
- 9 this route be selected there may be additional communities choosing to participate as
- 10 intervenors to further emphasize their concerns.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What is meant by “difficulty with future projects based on lack of faith in MH process”, and why is that a factor being considered during the route selection process for the Manitoba-Minnesota Transmission Project?

RESPONSE:

- 1 The question refers to the notes from the Round 2 route evaluation workshop, specifically the
- 2 notes from the Community Breakout group (EIS, Chapter 5, section 5.5.4 and Appendix 5D).
- 3 Please refer to response SSC-IR-143. Route AY was considered less preferred from a cost,
- 4 system reliability, risk to schedule, environment (natural) and a community perspective and
- 5 ultimately was ranked third overall out of the five routes considered.
- 6 The sentence quoted above relates to concerns shared by the FNMEP team surrounding the
- 7 potential response from specific communities should this route be selected. Based on the
- 8 understanding that there was existing concerns in the area, it was contemplated that should
- 9 this route be selected First Nations might feel that their concerns had not been considered,
- 10 which might cause difficulty with future projects based on lack of faith in the Manitoba Hydro
- 11 process.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

Where in the modified EPRI-GTC methodology is “difficulty with future projects based on lack of faith in MH process” considered?

RESPONSE:

- 1 The EPRI-GTC methodology includes input from the Community Perspective. This question is
- 2 referencing a statement made in the notes from the February 14, 2014 MMTP Routing
- 3 Workshop Community Breakout Group notes. As noted in Appendix 5D this discussion occurred
- 4 as part of the Community Groups consideration of the preference determination ranking for
- 5 route finalists in Round 2 of transmission line routing.

SUBJECT AREA: Routing, First Nation and Metis Engagement

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What is the “additional risk of alienating FNs from MH for this and future projects” being referred to?

RESPONSE:

- 1 The question refers to the notes from the Round 2 route evaluation workshop, specifically the
- 2 notes from the Community Breakout group (EIS, Chapter 5, section 5.5.4 and Appendix 5D).
- 3 Please refer to response SSC-IR-143. Route AY was considered less preferred from a cost,
- 4 system reliability, risk to schedule, environment (natural) and a community perspective and
- 5 ultimately was ranked third overall out of the five routes considered.
- 6 The sentence quoted above relates to concerns shared by the FNMEP team surrounding the
- 7 potential response from specific communities should this route be selected. Based on the
- 8 understanding that there was existing concerns in the area, it was contemplated that should
- 9 this route be chosen there was a risk of alienating First Nations from Manitoba Hydro for this
- 10 and future projects.

SUBJECT AREA: Routing, First Nation and Metis Engagement

REFERENCE: EIS, Chapter 5, section 5.5.4 and Appendix 5D

QUESTION:

What type of hearings and court challenges are being referred to?

RESPONSE:

- 1 Please refer to response to SSC-IR-143.
- 2 The meeting notes referenced above relate to discussions regarding the community perspective
- 3 for route AY and concerns raised through the First Nation and Metis Engagement Process about
- 4 this area including cultural, spiritual and resource uses in this area. Based on this feedback, it
- 5 was conceivable that the introduction of this new route could lead to court challenges such as
- 6 the seeking of an injunction or a review of any regulatory decisions.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

What is the “Provincial hearing” being referred to?

RESPONSE:

- 1 The Clean Environment Commission hearing

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4 and Appendix 5D**

QUESTION:

Why is there a missing data set related to commercial Crown forest plantations?

RESPONSE:

- 1 Manitoba Hydro had not received the data from the Province of Manitoba at the time of the
- 2 workshop. This data plays a very minor role in informing the qualitative analysis discussion of
- 3 land use in the project area by members of the “Built” perspective breakout group on February
- 4 18, 2014, and was replaced when required by aerial imagery interpretation.

SUBJECT AREA: **Routing, Property**

REFERENCE: **EIS, Chapter 5, section 5.5.4**

QUESTION:

What is Manitoba Hydro's "established and clearly defined process for the acquisition of private land"?

RESPONSE:

1 Legal surveys are conducted and plans are prepared to determine the location of the right of
2 way on private lands. Right-of-way boundaries determine the amount of land (acreage) that will
3 be affected by the right-of-way. Appraisals are prepared for each parcel of private land based
4 on the acreage and the fair market value of a particular piece of property. Easement
5 agreements are drafted and discussed with each individual landowner following which all
6 voluntary easements are registered at the respective Land Titles Office. Any adjustment in
7 property value at time of registration results in a true-up payment to the landowner.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.5.4**

QUESTION:

Manitoba Hydro is not a participant in the consultation process. What “potential increased amount of work and time associated with the Crown consultation process” is being referred to?

RESPONSE:

- 1 Please refer to response SSC-IR-102.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.6.4 and Appendix 5E

QUESTION:

How did Manitoba Hydro decide who should be invited to the workshop?

RESPONSE:

- 1 Please refer to response SSC-IR-082.

SUBJECT AREA: **Routing, Public Engagement**

REFERENCE: **EIS, Chapter 5, section 5.6.4 and Appendix 5E**

QUESTION:

Why did Manitoba Hydro decide to not invite members of the public?

RESPONSE:

- 1 Please refer to response SSC-IR-083.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.6.4 and Appendix 5E

QUESTION:

For each of the Manitoba Hydro attendees listed in Appendix 5E, please provide their job title and identify which perspective they represented.

RESPONSE:

- 1 The table below provides the list of attendees and their associated titles. With respect to which
- 2 specific perspectives they represented, this varied. While participants certainly spoke the
- 3 perspectives most closely related to their area of expertise, they also contributed to discussions
- 4 related to other perspectives as well. Additional details related to general workshop dynamics
- 5 can be found in response SSC-IR-090.

ROUND 3 ROUTING WORKSHOP ATTENDEES		
NAME	TITLE/DISCIPLINE	COMPANY/GROUP
Maggie Tisdale	Senior Environmental Assessment Officer	Manitoba Hydro, Licensing and Environmental Assessment Department
Trevor Joyal	Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
James Matthewson	Senior Environmental Assessment Officer	Manitoba Hydro, Licensing and Environmental Assessment Department
Sarah Coughlin	Senior Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
Shannon Johnson	Manager	Manitoba Hydro, Licensing and

ROUND 3 ROUTING WORKSHOP ATTENDEES		
NAME	TITLE/DISCIPLINE	COMPANY/GROUP
		Environmental Assessment Department
Jon Kell	Civil Design Section Head	Manitoba Hydro, Transmission and Civil Design Department
Ken Duchminsky	Transmission line Construction head	Manitoba, Transmission Line Construction Section Head
Amna Mackin	Project Manager	Manitoba Hydro, Transmission Projects
Jim Keil	Department Manager	Manitoba Hydro, Transmission Line and Civil Construction
Patrick Allan	Project Manager	Manitoba Hydro, Transmission Projects
David Jacobson	Interconnection Grid Supply Section Head	Manitoba Hydro, System Planning Department
Lindsay Thompson	Environmental Specialist	Manitoba Hydro, Licensing and Environmental Assessment Department
Robin Gislason	Engagement Coordinator	Manitoba Hydro, Licensing and Environmental Assessment Department
Rob Kalichuk	Technical Assistant	Manitoba Hydro, Transmission Line and Civil Design
Mark Wankling	Property Rep	Manitoba Hydro, Property Department
Sophia Garrick	Environmental Specialist	Manitoba Hydro, Transmission Line Maintenance
Larry Wiebe	Geospatial Information Officer	Manitoba Hydro, Transmission Line and Civil Design
David Whetter	Socioeconomic Assessment	Stantec

ROUND 3 ROUTING WORKSHOP ATTENDEES		
NAME	TITLE/DISCIPLINE	COMPANY/GROUP
Leane Wyenberg	Biophysical Assessment	Stantec
Bill Krawchuk	Socioeconomic Assessment	Stantec
Frank Bohlken	Socioeconomic Assessment	Stantec
Lisa Peters	Biophysical Assessment	Stantec
Stephen Biswanger	Project Manager	Stantec
Dan Routhier	Biophysical Assessment	Stantec
Nick De Carlo	Biophysical Assessment	Stantec
Butch Amundson	Aboriginal, Traditional Knowledge	Stantec
Lindsay Stokalko	Aboriginal, Traditional Knowledge	Stantec
Nicole Kearns	Biophysical Assessment	Stantec

6

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.6.4 and Appendix 5E**

QUESTION:

Section 5.6.4 refers to route BWZ. The meeting notes refer to both BMZ and BWZ. Are BWZ and BMZ the same route?

RESPONSE:

- 1 No, the routes are different. The meeting notes refer to both BMZ and BWZ.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5, section 5.6.4 and Appendix 5E

QUESTION:

What is “potential Round 4”?

RESPONSE:

- 1 A “potential Round 4” refers to a potential need to present a “preferred route” back to the
- 2 public, First Nations, the Manitoba Metis Federation, Indigenous organizations, government
- 3 agencies, stakeholders and landowners following Round 3. Manitoba Hydro would have
- 4 conducted a Round 4 if there were significant changes where the preferred route was located
- 5 in an area where feedback and input had not been previously gathered during Round 3.

SUBJECT AREA: **Routing, None**

REFERENCE: **EIS, Chapter 5, section 5.8**

QUESTION:

How many years of study?

RESPONSE:

- 1 Three years - the routing process was initiated in February 2012 and resulted in the selection of
- 2 the final preferred route three years later, in April of 2015 (Section 5.1, page 5-1).

SUBJECT AREA: Routing, None

REFERENCE: EPRI Technical Paper, pg 2-43, 2-45, Workshop Transcript, pg 106

QUESTION:

Both pages reference the prospect for customizing the weights to be “more sensitive”, or “expanded or contracted” to deal with various routing situations. Please indicate how MH made the decision to use $\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$ allocation of factors to Engineering, Natural, and Built Environments. Please discuss specifically what, if any, consideration was given to customizing the factors to accord with the Southern Manitoba situation.

RESPONSE:

- 1 The EPRI-GTC methodology is based on the three perspectives of Engineering, Built, and Natural
- 2 (described in Section 5.2, page 5-8). These perspectives form the basis for both the Alternate
- 3 Corridor Evaluation Model (Table 5-3, page 5-17) and the Alternate Route Evaluation Model
- 4 (Table 5-6, page 5-30). The outputs from these models only treat the three perspectives equally
- 5 under the “simple average” scenario. The outputs from these models also include scenarios
- 6 that emphasize each of the perspectives. For example, the “Built Environment” suitability
- 7 surface (Map 5-7), which is used to create the “Built Environment” corridors gives 5 times the
- 8 emphasis to the factors in the built environment sub-model over the natural and engineering
- 9 sub-models (see the “Creating Suitability Surfaces” section, page 5-21 for more details).
- 10 The same is done for the Alternate Route Evaluation Model. Alternate route segments and the
- 11 associated route statistics are created for each of the three perspectives (built, engineering,
- 12 natural) that give 5 times emphasis to each of the perspectives (or 5/7, 1/7, 1/7), as well as the
- 13 simple average in which they are treated equally (1/3, 1/3, 1/3).
- 14 The EPRI-GTC process that Manitoba Hydro used for MMTP, and the models created for it, were
- 15 all based on the understanding that it was to be used for transmission line routing in southern
- 16 Manitoba.

SUBJECT AREA: **Routing, None**

REFERENCE: **Chapter 5, pages 5-6, 5-38; EPRI Technical Paper, pg 2-43, 2-45**

QUESTION:

The EPRI process employs expert judgment to set final criteria weighting. The MH process used the 3 member Management Team. Please provide details of the expertise of the Management Team so the similarity of these processes may be evaluated.

RESPONSE:

- 1 Please refer to responses SSC-IR-024, SSC-IR-109 and CEC-IR-013.

SUBJECT AREA: Routing, None

REFERENCE: Chapter 5, pages 5-2, 5-6, EPRI-GTC Technical Paper, pg 2-43

QUESTION:

MH states their approach “corresponds to the main steps of the EPRI methodology...”.

However, MH has a step called the Preference Determination Model. They indicate the weights for the various criteria were developed by the 3 man Management Team (pg 5-6). EPRI, on the other hand, notes it used the Analytical Hierarchy Process (AHP) to assign weights. Please explain the differences in these processes used to assign weights.

RESPONSE:

- 1 The weights for the criteria in the Preference Determination Model for the Project were
- 2 developed by the management team. As noted in response SSC-IR-165, this model corresponds
- 3 to the step in the EPRI (2006) paper called “Expert Judgment”. The management team had a
- 4 group discussion and assigned weights without the AHP due to the relatively small number of
- 5 criteria. This is a common approach for calibrating this model using the EPRI Methodology.

- 6 Please refer to responses CEC-IR-015, SSC-IR-109, and SSC-IR-112.

SUBJECT AREA: Routing, Least Cost Path

REFERENCE: Transcript of Workshop, pages 122 – 124, Chapter 5, pg 5-64

QUESTION:

The siting process is stated to be an effective means of route selection that minimizes impacts on the landscape through the selection and weighting of various factors. The alignment of the least cost surfaces is purported to yield the most suitable paths for a transmission line. Please reconcile the routing process used to generate the Alternative Routes with the need to make significant adjustments to the route that, on the face of it, should never have come into existence. What aspect of the routing methodology allows such obviously poor segments to be selected?

RESPONSE:

- 1 Section 5.4.3.1, Section 5.5.4 and Section 5.6.4 include the “Comparative Evaluation” aspects of
- 2 the methodology. Please refer to CEC-IR-071 for further description of route and segment
- 3 development.

SUBJECT AREA: Routing, None

REFERENCE: Section 2, Siting Methodology Phases, EPRI-GTC Technical Paper (2006), pg 2-1, Appendix 5A-1, pg 5A-1

QUESTION:

The Routing Process cited by MH, at the top of page 5A-1 states, “The EPRI-GTC siting methodology requires the development of four separate models...”, and then lists, in abbreviated notation, macro corridor, alternative corridor, alternative route, and finally preference determination. The last one of these, preference determination, does not appear to be anywhere in the EPRI-GTC methodology. Please explain:

- (a) The origin; and
- (b) Specific purpose this preference determination model is intended to serve.

RESPONSE:

- 1 The Preference Determination Model, is the name that Manitoba Hydro chose to use to refer to
- 2 the set of weights and criteria that are applied to the subset of routes screened forward from
- 3 the Alternate Route Evaluation Model, termed “Expert Judgment” in the 2006 Technical Paper
- 4 describing the EPRI-GTC methodology.

- 5 The name of the model reflects the purpose of the model, which is to select a preferred route
- 6 from a subset of routes.

SUBJECT AREA: Routing, None

REFERENCE: Transcript pg 64, lines 12-14; Summary of Round 3, PEP, pg E5-7

QUESTION:

Transcript of Workshop, pg 64, lines 12-14; Summary of Round 3, PEP, pg E5-7

Mr. Block indicated “we want to consider everybody’s perspective equally”. He further indicates they (MH) then take the top 3% of each of Built, Natural, Engineering and Simple Average to generate the routes. Based upon the feedback from the PEP activities, it was apparent that stakeholders saw the built (i.e. homes and buildings), as more important. Why then wasn’t there an unequal weighting to reflect the importance of the opinion of the stakeholders?

RESPONSE:

- 1 Determining a preferred route for a high voltage transmission line is a complex iterative process
- 2 designed to balance multiple perspectives and limit overall effect. The Public Engagement
- 3 Process is one of many methods we use to gather information on the landscape and feedback
- 4 from this process is one of many considerations. Manitoba Hydro considers all input and
- 5 perspectives and it is clear in the models applied in the EPRI-GTC how this input is weighted.

- 6 The proximity of the transmission line to homes is given consideration at numerous stages and
- 7 through numerous mechanisms. The response CEC-IR-071 notes proximity to homes as a key
- 8 consideration in route planning. The “Built” perspective in the alternate route evaluation model
- 9 gives the largest consideration to homes and the proximity to homes. In preference
- 10 determination, the proximity to homes and feedback from communities in this regard factors in
- 11 again in the “Community” rankings and the rankings pertaining to the “Built Environment”.

SUBJECT AREA: Routing, None

REFERENCE: EIS, Chapter 5

QUESTION:

Is Manitoba Hydro using a modified EPRI-GTC methodology to identify the route for the Birtle Transmission Project? If so, what are the differences (if any) between the methodology used by Manitoba Hydro for the Birtle Transmission Project and the Manitoba-Minnesota Transmission Project? If there are differences, why did Manitoba Hydro make changes to the methodology?

RESPONSE:

- 1 This question relates to the Birtle Transmission Project which is out of scope for the Clean
- 2 Environment Commission hearing.

SUBJECT AREA: Routing, Public Engagement

REFERENCE: EIS, Chapter 5

QUESTION:

Did Manitoba Hydro consider soliciting and obtaining public input and feedback into the decision to adopt the EPRI-GTC methodology? If not, why not?

RESPONSE:

- 1 Public input had been previously received during the Bipole III Transmission Project and
- 2 through the associated CEC report on routing methodology. During the course of various open
- 3 houses and engagement activities, further public input has been received. However, specific
- 4 public solicitation on the type of methodology was not sought. Rather, external expertise was
- 5 obtained.

SUBJECT AREA: **Routing, Public Engagement**

REFERENCE: **EIS, Chapters 3 and 5**

QUESTION:

Did Manitoba Hydro solicit and obtain public input into the decision to adopt the EPRI-GTC methodology? If not, why not? If so, please provide the public input and feedback received.

RESPONSE:

- 1 Please refer to response SSC-IR-168.

SUBJECT AREA: **Routing, Public Engagement**

REFERENCE: **EIS, Chapters 3 and 5**

QUESTION:

Did Manitoba Hydro consider soliciting and obtaining public input and feedback into the decision to modify the EPRI-GTC methodology? If not, why not?

RESPONSE:

- 1 Please refer to response SSC-IR-168.

SUBJECT AREA: **Routing, Public Engagement**

REFERENCE: **EIS, Chapters 3 and 5**

QUESTION:

Did Manitoba Hydro solicit and obtain public input into the decision to modify the EPRI-GTC methodology? If not, why not? If so, please provide the public input and feedback received.

RESPONSE:

- 1 Please refer to response SSC-IR-168.

SUBJECT AREA: **Routing, Public Engagement**

REFERENCE: **EIS, Chapters 3 and 5**

QUESTION:

Did Manitoba Hydro consider soliciting and obtaining public input and feedback into of the modifications made by Manitoba Hydro to the EPRI-GTC methodology? If not, why not?

RESPONSE:

- 1 Please refer to response SSC-IR-168.

SUBJECT AREA: **Routing, Public Engagement**

REFERENCE: **EIS, Chapters 3 and 5**

QUESTION:

Did Manitoba Hydro solicit and obtain public input into the modifications made by Manitoba Hydro to the EPRI-GTC methodology? If not, why not? If so, please provide the public input and feedback received.

RESPONSE:

- 1 Please refer to response SSC-IR-168.

SUBJECT AREA: Public Engagement, None

REFERENCE: EIS, Chapter 3, section 3.10.2.2.2.

QUESTION:

Please provide details of the involvement of the RM of La Broquerie “since initiation of the PEP”.

RESPONSE:

- 1 The following outlines the engagement of the RM of La Broquerie throughout the PEP.
- 2 Pre-engagement survey (July 2013-September 2013)
 - 3 • Sent a letter introducing the Project noting someone would follow-up by phone to
 - 4 understand their interest in the project. There were three follow-up phone calls following
 - 5 the letter that were made between July 30 & September 20, 2013.
 - 6 • As a result of the calls, the Reeve of the RM indicated an interest in participating in
 - 7 meetings, open houses & workshops. Email was the preferred method of contact.
- 8 Round 1 (September 2013-April 2014)
 - 9 • Manitoba Hydro provided a letter outlining the alternative routes, inviting them to a
 - 10 workshop, providing a listing of open houses and asking whether a meeting with council
 - 11 was desired.
 - 12 • Council did not participate in the stakeholder workshop or stakeholder meeting during
 - 13 this round to which they were invited.
 - 14 • An open house was held in both Steinbach and Marchand. No Council members
 - 15 identified themselves.
 - 16 • Segment 207 was developed based on feedback from the RM and participants to place
 - 17 the transmission line in crown lands and further away from community development.

18 Round 2 (April – August 2014)

- 19 • Manitoba Hydro sent an email with a request to meet with Council.
- 20 • As a result, a meeting was held with the RM of La Broquerie Council in conjunction with
21 the Seine Rat River Conservation District and the RM of Hanover (April 24, 2014).
- 22 • The RM of La Broquerie provided Manitoba Hydro with Resolution 172-14 on May 16,
23 2014 that stated (Appendix A1 – Public Engagement Technical Data Report)
- 24 ○ *whereas the Council of the Rural Municipality of La Broquerie has serious*
25 *concerns and objections to alternative route (Segment) #208”, “and whereas the*
26 *Council is of the opinion that (Alternative) route (Segment) #207 offers the least*
27 *disruptive and economical route for citizens and Manitoba Hydro”; “Therefore be*
28 *it resolve that the Council of the RM of La Broquerie on behalf of its citizens,*
29 *strongly urge Manitoba Hydro to consider alternative route #207 as the logical*
30 *alternative for this project.*
- 31 • An open house was held in La Broquerie (April 24, 2014) and Marchand (April 30, 2014).
32 No Council members identified themselves.
- 33 • Multiple mitigative segments were developed based on the feedback from the RM and
34 participants.

35 Round 3 (January 2015-September 2015)

- 36 • RM Council meeting (February 11, 2015) where Manitoba Hydro representatives discussed
37 the preferred route and current status of the project.
- 38 • Second RM Council meeting where Manitoba Hydro discussed in more detail how Manitoba
39 Hydro determines transmission line placement (February 23, 2015).
- 40 • Attendance of some Council members (including CAO and Reeve) at the open house in La
41 Broquerie (February 17, 2015).
- 42 • Manitoba Hydro representatives (or staff) spent four days in the community to discuss the
43 project and the preferred route with affected landowners (Landowner Information Centres
44 and a Public Open House (143 attendees)).
- 45 • Petition received by Manitoba Hydro, signed by +350 individuals.

- 46 • Multiple mitigative segments developed in response to feedback received from the RM such
47 as a segment following Fire Guard 13.

48 EIS filing (September 2015)

- 49 • MH sent an email to the RM outlining the EIS submission & regulatory review process.

50 Ongoing communication

- 51 • Affected landowners have been informed by letter and follow up phone call regarding the
52 upcoming processes. Each potentially affected landowner to house the transmission line
53 has been assigned a Manitoba Hydro liaison to coordinate discussions between Manitoba
54 Hydro and the landowner.
- 55 • Email sent to RM outlining regulatory process, current project activities, and the benefit
56 program (February 2016).
- 57 • Email campaigns will continue to be utilized to notify those who have interest and have
58 signed up to receive communication.
- 59 • Landowners with a meter located within one mile of the preferred route were provided a
60 letter on February 17, 2017 that encouraged individuals to sign up for project updates or to
61 contact Manitoba Hydro if email was not their preferred method of receiving project
62 updates.

SUBJECT AREA: Public Engagement, None

REFERENCE: EIS, Chapter 3, section 3.10.2.2.2.

QUESTION:

Please provide details of the “numerous” meetings with council and provide the documentation of the “concerns raised regarding route selection, potential effect on future development and the proximity of the transmission line to the community of La Broquerie”.

RESPONSE:

- 1 Meeting notes were developed and submitted as part of the EIS for meetings with various
- 2 interested parties. The details regarding the meetings between Manitoba Hydro and the RM of
- 3 La Broquerie can be found in Appendix A of the Round 2 Technical Data Report and Appendix E
- 4 of the Round 3 Technical Data Report.

- 5 The following sections outline the documentation and summary of the concerns raised by the
- 6 RM of La Broquerie:
 - 7 • Ch. 3 - 3.7.2.1.4
 - 8 • Ch. 3 - 3.8.1.4.1
 - 9 • Ch. 3 - 3.10.2.1.1
 - 10 • Ch. 3 - 3.10.2.1.2
 - 11 • Ch. 3 - 3.10.2.1.3
 - 12 • Ch. 3 - 3.10.2.2.2

SUBJECT AREA: Public Engagement, None

REFERENCE: EIS, Chapters 3, section 3.10.2.2.2.

QUESTION:

Please provide details of the three council meetings attended by Manitoba Hydro.

RESPONSE:

- 1 Meeting notes were developed and submitted as part of the EIS for meetings with various
- 2 interested parties (please refer to section 3.10.2.2.2.). The details regarding the meetings
- 3 between Manitoba Hydro and the RM of La Broquerie can be found in Appendix A of the Round
- 4 2 Technical Data Report and Appendix E of the Round 3 Technical Data Report.

SUBJECT AREA: Public Engagement, None

REFERENCE: EIS, Chapters 3, section 3.10.2.2.2.

QUESTION:

Please identify the “Provincial and Federal representatives” and provide details of those meetings.

RESPONSE:

- 1 These meetings were held to share information and current status and as such no meeting
- 2 notes were documented. The provincial representative was MLA Dennis Smook and the federal
- 3 representative was MP Ted Falk.

SUBJECT AREA: Public Engagement, None

REFERENCE: EIS, Chapter 3, section 3.10.3.2 and Table 3-17

QUESTION:

Please provide details of the “feedback received from the home purchasers in the proximity of the preferred route”.

RESPONSE:

- 1 Individuals indicated they had recently purchased land and that they were unaware of the
- 2 location of the project in relation to their newly purchased property.

- 3 Manitoba Hydro utilizes broad notification methods, a project website, email sign up, and a
- 4 dedicated project information phone line and email address to reach many individuals such as
- 5 local realtors or potential landowners. In response to the home purchaser feedback, it was
- 6 determined to continue using these notification measures and to directly notify the Manitoba
- 7 Real Estate Association of project activities. A letter was sent to the association to outline the
- 8 project and to contact us if they wished to discuss how to be notified in the future of upcoming
- 9 projects.

SUBJECT AREA: Public Engagement, None

REFERENCE: EIS, Chapter 3, section 3.11.1.1.8

QUESTION:

Please provide the information provided to the Manitoba Real Estate Board (and/or the Manitoba Real Estate Association referred to in Table 3-17)

RESPONSE:

- 1 A letter was provided at the time of filing following feedback received from new local
- 2 landowners. The attached letter was provided to Mr. Salvatore, CEO of the Manitoba Real
- 3 Estate Association (MREA). In addition, the MREA was added to a stakeholder list to receive
- 4 notices as the project progresses.

2015 09 29

David Salvatore
Manitoba Real Estate Association
1873 Inkster Blvd
Winnipeg, MB R2R 2A6

Dear Mr. Salvatore,

PROPOSED MANITOBA-MINNESOTA TRANSMISSION PROJECT: FINAL PREFERRED ROUTE DETERMINED

Based on feedback received over the past two years through the public engagement and the environmental assessment processes, a final preferred route has been determined and the Environmental Impact Statement (EIS) has been submitted to begin the regulatory review process.

The Manitoba-Minnesota Transmission Project (MMTP) is a 500-kilovolt alternating current transmission line 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.

Although the location of the transmission line is preferred, the Project still requires provincial and federal approval prior to construction. A map and other Project related material has been included in this package for your review.

Throughout our engagement process, we heard from new land purchasers that many agents were unaware of our proposed development plans. We wanted to share this information with the Association so that you can disseminate this project to your members.

The EIS has been submitted to Manitoba Conservation and Water Stewardship (MCWS) and a public review period is underway. Comments or questions regarding the contents of the EIS can be submitted to MCWS for their consideration and can be accessed at <http://gov.mb.ca/conservation/eal/registries/5750mbhydrombminnesota/index.html>.

The National Energy Board will be involved in the review of the EIS and further information regarding their involvement will be provided as it becomes available.

If the association would like to meet to discuss this project as well as notification methods for future projects, I encourage you to contact me directly at (204)-360-4305.

To sign up for email updates, or to gather further information on the Project, you can visit www.hydro.mb.ca/mmtp.

Yours truly,



Trevor Joyal
Environmental Specialist - Licensing & Environmental Assessment Dept

SUBJECT AREA: Public Engagement, None

REFERENCE: EIS, Chapter 3 and Appendix 3A

QUESTION:

Why is the Bipole III Coalition considered to be a stakeholder group, and what feedback (if any) did it provide to Manitoba Hydro?

RESPONSE:

- 1 The Bipole III Coalition was an intervenor in the Bipole III Transmission Project's Clean
- 2 Environment Commission hearing. They brought forward evidence and specialists regarding the
- 3 project at the hearing and were flagged as potentially having interest in other Manitoba Hydro
- 4 projects. Manitoba Hydro contacted the Coalition and subsequently received a letter outlining
- 5 that they did not wish to participate in the public engagement process and they would continue
- 6 to gather information from the project webpage.