SUBJECT AREA: **FNEMP**

REFERENCE: **CEC-IR-079**

QUESTION:

Please provide details about the March 23, 2017 follow-up meeting and any other follow-up meeting, including but not limited to the following:

(a) Details about the nature of discussions held during the meeting(s), and provide records and/or notes if available;

(b) Details about any area(s) toured, and why;

(c) Copies of all materials provided by Manitoba Hydro to participants;

(d) Copies of all materials provided to Manitoba Hydro by participants; and

(e) Copy of the invitation(s) sent by Manitoba Hydro to the participants.

RESPONSE:

(a) A community monitoring meeting was set for March 23, 2017. The meeting began with a discussion about monitoring interest/values. This discussion led to communities raising broader concerns and requesting some time to have a discussion without Manitoba Hydro in the room. While Manitoba Hydro remains interested in further discussions with communities regarding community monitoring, there have been no follow-up meetings to date. Manitoba Hydro does not have notes from the meeting.

(b) The meeting took place at Manitoba Hydro's office, 820 Taylor Ave, Winnipeg, Manitoba.

(c) The plain language summary of the MMTP EIS was available at the meeting (SSC-IR-397_Attachment2).

(d) No materials were provided to Manitoba Hydro by participants.

(e) Please see SSC-IR-398_Attachment

820 Taylor Ave (3) • Winnipeg Manitoba Canada • R3M 3T1
Telephone / *N° de téléphone :* 204-360-3016 • Fax / *N° de télécopieur :* 204-360-6176
scoughlin@hydro.mb.ca

2017 02 24

Representative
Community
Address
Postal code

Dear Representative:

Manitoba Hydro would like to invite a member from Community to a meeting on March 23rd, 2017 to further discuss Manitoba-Minnesota Transmission Project (MMTP) monitoring. The meeting will be held at our office at 820 Taylor, Winnipeg, MB between 1:30 pm and 3:30 pm.

Reimbursement for mileage and an honorarium will be provided for one member representative. As per the Manitoba Hydro reimbursement policy, we are unable to provide honorariums to elected officials or salaried employees of the community or organization.

Please contact me at (204)360-3016 with the name of a community representative who is able to attend and further discuss roles and purpose of monitoring MMTP during construction.

We look forward to continued discussions with your community on the Project.

Yours Truly,

Original Signed By

Sarah Coughlin, Senior Environmental Specialist

Manitoba Hydro

SUBJECT AREA: **Sustainable Yield of Caribou**

REFERENCE: **MMF-IR-020 to MMF-IR-030**

QUESTION:

For each of routes TC, UM, SU, UC, SY, DKT, EEL, FWZ, DWM, AQS, AQO and BZG, please advise if that route passes through:

(a) Manitoba Game Hunting Area 34A?

(b) Manitoba Game Hunting Area 35?

(c) Manitoba Game Hunting Area 35A?

RESPONSE:

Routes in GHA 34A: BZG, DKT and FWZ.

Routes in GHA 35: BZG, AQO, AQS, DKT, DWM, EEL and FWZ.

Routes in GHA 35A: TC, UM, SU, UC, SY, DKT, EEL, FWZ, DWM, AQS, AQO and BZG.

SUBJECT AREA: **Methodology**

REFERENCE: **SSC-IR-002 and CEC-IR-013**

QUESTION:

Reviewing these two IR responses, it appears that Preference Determination is in reality 2 steps. The criteria identification and weighting were calibrated by the Management Team, and then Expert Judgment was used to apply the criteria and weightings. This appears to differ from the EPRI-GTC method. Please confirm this difference, or explain how they are in fact alike.

RESPONSE:

As noted in the response to SSC-IR-002, Preference Determination is the name given to the model used in the final step of comparative route evaluation. In the EPRI-GTC process this model is referred to as "Expert Judgment" (EPRI-GTC, 2006.).

As described in the response to CEC-IR-013, before the Preference Determination Model is applied in route evaluation, it is first calibrated by the Management Team.

This approach does not differ from the EPRI-GTC methodology. The EPRI-GTC Methodology provides a tool called "Expert Judgment Model" used to select the preferred route. In the example described in the 2006 EPRI-GTC report the project team assigned the criteria and weights. However, the report does not prescribe who should provide input in this phase. The EPRI-GTC Methodology does not seek to prescribe which specific personnel within a company should provide input but leaves that to each user's judgment, to best reflect the context of the Project and company involved.

Please also see the response provided to SSC-IR-163.

SUBJECT AREA: **Methodology**

REFERENCE: **SSC-IR-015 and CEC-IR-013**

QUESTION:

Bullet Number 6 notes "Leveraging internal expert judgment to calibrate the Preference Determination Model…". However, the discussion in CEC-IR-013 notes it was the Management Team that did the calibration, and the Project Team that supplied the Expert Judgment. These are inconsistent. Please clarify this issue.

RESPONSE:

The internal expert judgment being referred to in bullet number 6 of the response to SSC-IR-015 is noting that the Management Team used their expert judgment to set criteria and weights for the Preference Determination Model. Expert judgment in this context refers to the comprehensive and authoritative knowledge and skill of the Management Team as professionals accountable for transmission.

The expert judgment referred to in the context of the Project Team and applying the Preference Determination Model in route evaluation (discussed in the response to CEC-IR-013).

SUBJECT AREA: **Route Selection**

REFERENCE: **SSC-IR-063 and CEC-IR-019**

QUESTION:

These replies do not answer the question; "Specifically, what is the smallest buffer that is effective." A reply incorporating a dimension (i.e. m or km) is requested.

RESPONSE:

Based on the weather study, a 10 km buffer over a 150 km distance results in a probability of simultaneous outage of two 500 kV lines due to tornadoes of one in 30 years, which is Manitoba Hydro's minimum acceptable reliability level for this type of disturbance. The separation distance of 10 km was also consistent with Minnesota Power's plans to maintain at least a six mile separation of the Great Northern Transmission Line from the existing 500 kV line between Riel and Forbes. The one in 30 year return period is consistent with reliability criteria developed by the Western Electricity Coordinating Council (WECC) and used in the Western Interconnection.

SUBJECT AREA: **Route Selection**

REFERENCE: **SSC-IR-064**

QUESTION:

A review of the reply would appear to eliminate any north-south route options that ran within 10km of M 602F. Is this the case, and if not, why not?

RESPONSE:

Manitoba Hydro did not eliminate any north-south route options that ran within 10km of M602F on the basis of the weather study alone. To mitigate potential weather effects, those north-south route options would have required costly increased structural strengthening to towers and/or construction of access roads to facilitate emergency maintenance. However, this would not have fully addressed the reliability concerns, and as such, these additional mitigation measures were factors that contributed to the determination of system reliability scores for each route in the preference determination step.

SUBJECT AREA: **Route Selection**

REFERENCE: **SSC-IR-070 and Appendix 5A.4.1**

QUESTION:

The reply references, for example, 27.1% criteria weight for Relocated Residences Within ROW. The discussion in 5A.4.1 notes for the "Built sub-model: Weight for relocated residences, potential residences, and proximity to residences was lowered as more criteria were added to the built model. Percent has to add up to 100." In the previous section (5A.4) this same factor was set at 35.3%. However, a check of the two lists of criteria both show 12 items, 3 of which are different. Hence the explanation is not accurate. Please provide an accurate explanation for the shift in criteria percentages.

RESPONSE:

The Alternate Route Evaluation Model was calibrated for the Manitoba Minnesota Transmission Project based on experience from previous projects, input from the Public (PEP), First Nation and Metis (FNMEP) Engagement Processes, discussions with stakeholders, and the fact that it is a 500 kV transmission line (the original model was created for 115 – 230 kV projects).

The weights associated with residents, proximity to residences and proposed development were adjusted to reflect input from the PEP (see Chapter 3, Section 3.5 for a summary). Feedback received indicated a number of proposed subdivisions in the area. Concerns were raised relating to the potential for the transmission line to limit future development (e.g. subdividing).

Accordingly, this led to an increase in the weight of the proposed development criteria, and slight decreases in the weights of the existing residences criteria (relocated residences, proximity to residences (100m)-edge of ROW, and proximity to residences (100m – 400m)-edge of ROW and minor adjustments to the agriculture criteria with the overall proportion of agriculture remaining about the same (<20%).

SUBJECT AREA: **Route Selection**

REFERENCE: **SSC-IR-070**

QUESTION:

It would appear that the "Built" perspective is diluted by numerous factors which do not have any relationship to "Built" factors, such as the 4 agricultural aspects. Why were the residential factors comingled with the agricultural factors thereby diluting the importance of residential issues?

RESPONSE:

As described in Chapter 5, Section 5.2, page 5-8:

> *"The Built Environment Perspective is concerned with limiting the effect on the socio-economic environment. In routing decision making, the built group is composed of* ***agricultural****, socio-economic, resource use and heritage discipline specialists, as well as Manitoba Hydro property and environmental staff.*

The Built Perspective includes all aspects of the socio-economic environment, including agriculture.

SUBJECT AREA: **Route Statistics**

REFERENCE: **SSC-IR-247**

QUESTION:

The answer states there are 52km of difference in the FPR compared to the SIL Route. The FPR is noted to start at Dorsey, while the SIL starts southwest of Riel. Please explain where the power to energize the SIL line will originate. Isn't it the case that the Dorsey to Riel segment is in fact common to both routes?

RESPONSE:

As discussed on page 2-1 of the EIS, the 500 kV AC transmission line (FPR) starts at the existing Dorsey Converter Station northwest of Winnipeg.

The power to energize all route options considered in route evaluation in all three rounds would come from Dorsey Converter Station.

The start point used in the calculation of metrics and statistics for the purposes of comparative evaluation of route options in Round 2 was the point southwest of Riel along the south loop transmission corridor (please see Map 5-17 in the EIS, Chapter 5). SIL was a route alternative considered in Round 2 comparative evaluation.

The Dorsey to Riel segment that was common to all routes considered changed in length from round to round, depending on the point the route exited from the SLTC.

SUBJECT AREA: **Route Statistics**

REFERENCE: **SSC-IR-247**

QUESTION:

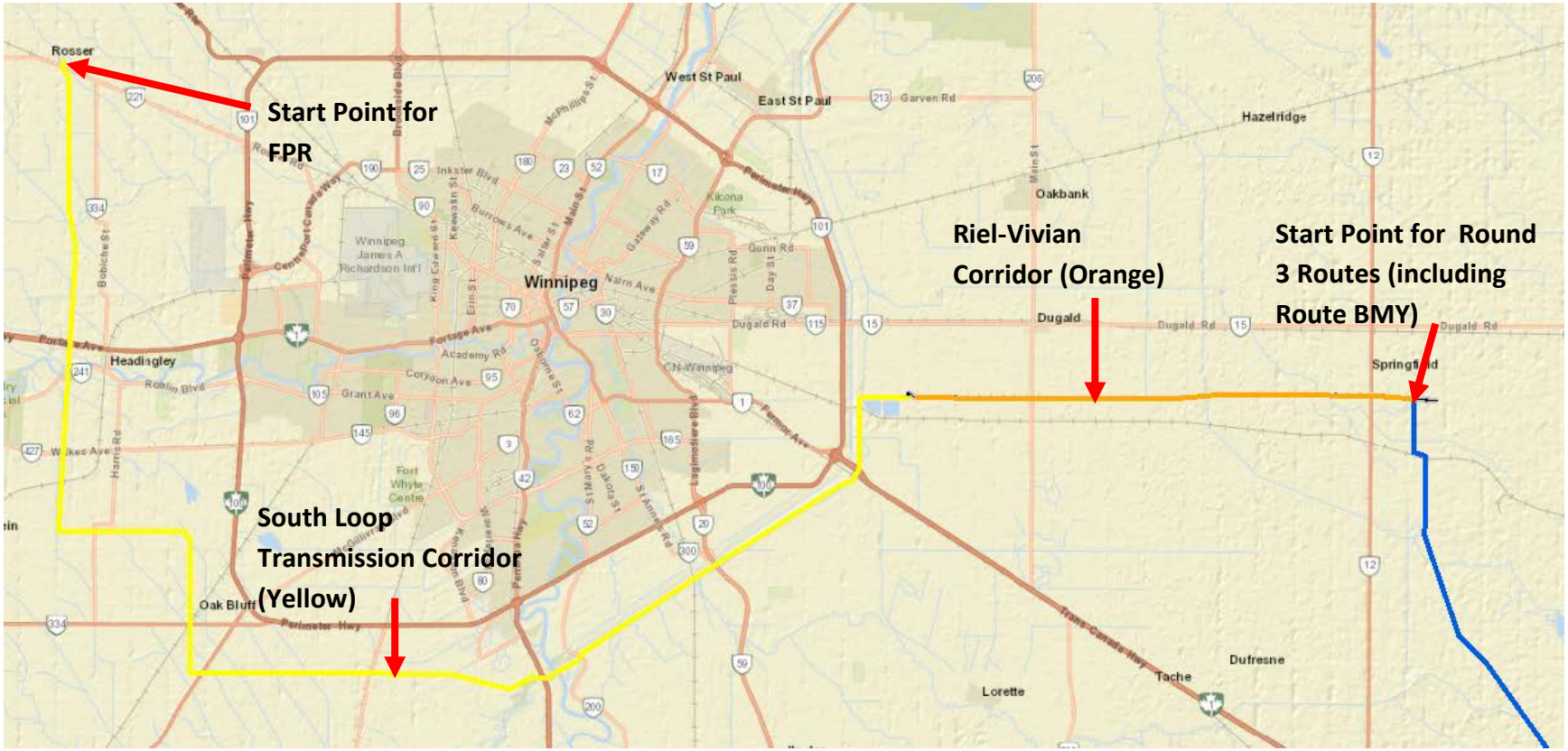
The answer reveals that Route BMY, which becomes the FPR has 17 transmission line crossings, not the 3 crossings indicated in Table 5-33. On the following page (5-117) the Score for System Reliability is shown as a 1. In other tables (see Tables 5-18 and 5-20 as examples) the number of transmission line crossings downgrades the scores (i.e. makes it higher on the 1-2-3 scale). Would the use of 17 crossings change the score compared to the 3 crossings noted in Table 5-33? If not, why not?

RESPONSE:

The response indicates that the FPR, not route BMY, has 17 transmission line crossings (from Dorsey Station to the Manitoba Border). Route BMY and the FPR have different start points (same end point, the Manitoba Border) therefore a different number of transmission line crossings.

Table 5-33 shows the route statistics for the top 5 routes (including Route BMY) from the Round 3 preference determination step. The route statistics for the Round 3 routes were calculated from a start point along the Riel-Vivian Transmission Corridor (RVTC); to the Manitoba-Minnesota border (SSC-IR-407_Attachment). They are not calculated on the common portions of the routes (portions along the South Loop Transmission Corridor (SLTC) or the RVTC).

All 5 routes shown in Table 5-33 have 3 transmission line crossings. If route statistics were created for all 5 routes starting from Dorsey Station, all 5 routes would still have the same number of transmission line crossings (as the routes are identical from Dorsey Station to the Round 3 start point), therefore there would be no change in scoring.



End Point for Route Statistics is the Manitoba Border.

SUBJECT AREA: **Biosecurity**

REFERENCE: **SSC-IR-219 - Attachment**

QUESTION:

What steps, if any, does Manitoba Hydro take to prevent the spread of invasive organisms (such as clubroot) when vehicles travel along "government road allowances" such as dirt roads? Please provide applicable details. If none, why not?

RESPONSE:

MH has developed a comprehensive biosecurity protocol with input from Manitoba Agriculture and other stakeholders such as Keystone Agricultural Producers and the Canola Growers Association. Any vehicles entering and exiting agricultural lands are required to follow strict biosecurity protocols to minimize any risk of transference of invasives or other pathogens onto agricultural lands. Where property has been identified with a confirmed presence of invasive organism such as clubroot, all vehicles entering the property must do so in a clean state and upon exiting full cleaning and disinfecting would be employed. These protocols are in place to prevent the spread of such organisms.

These steps help to prevent the spread of invasive organisms (such as clubroot) when vehicles travel along government road allowances.

SUBJECT AREA: **Biosecurity**

REFERENCE: **SSC-IR-219 - Attachment**

QUESTION:

What steps, if any, does Manitoba Hydro take to prevent the spread of invasive organisms (such as clubroot) when vehicles travel along gravel roadways? Please provide applicable details. If none, why not?

RESPONSE:

Manitoba Hydro has developed a comprehensive biosecurity protocol with input from Manitoba Agriculture and other stakeholders such as Keystone Agricultural Producers and the Canola Growers Association. Any vehicles entering and exiting agricultural lands are required to follow strict biosecurity protocols to minimize any risk of transference of invasives or other pathogens onto agricultural lands. Where property has been identified with a confirmed presence of invasive organisms such as clubroot, all vehicles entering the property must do so in a clean state and upon exiting full cleaning and disinfecting would be employed. These protocols are in place to prevent the spread of such organisms.

These steps help to prevent the spread of invasive organisms (such as clubroot) when vehicles travel along gravel roadways.

SUBJECT AREA: **Biosecurity**

REFERENCE: **SSC-IR-219 - Attachment**

QUESTION:

Does Manitoba Hydro have a separate clubroot biosecurity protocol? If so, please provide a copy.

RESPONSE:

No, Manitoba Hydro does not have a separate clubroot biosecurity protocol, Additional direction for working on properties with the confirmed presence of clubroot is managed through a project-specific appendix to the protocol. Attached is a copy of the Appendix for Bipole III Transmission Project.

Agricultural Biosecurity Standard Operating Procedures
Transmission Business Unit

Appendix I - Bipole III Transmission Project Construction Cleaning/Disinfecting Protocols for Clubroot, Livestock and Other High Risk Categories

1. PURPOSE

The following is an appendix to the Agricultural Biosecurity Standard Operating Procedure (SOP), intended for use on properties along the Bipole III Transmission Project route during construction where the presence of soil borne pathogens, such as clubroot, have been identified and instances where landowners have requested additional procedures based on their own biosecurity protocols or in instances where their farming activities require an additional level of protection, such as pedigree seed producers. The following protocols are to be followed to minimize and manage the associated risk of equipment working on those properties when working during non-frozen ground conditions.

The above properties would fall under the defined High Risk category in the SOP and the cleaning procedures outlined below are to be followed. The remaining elements of the SOP remain in effect - i.e. cleaning records are to be completed and submitted as per the SOP.

2. WASHING OF EQUIPMENT, VEHICLES AND FOOTWEAR

All equipment, vehicles and PPE (i.e. boots), that are working on identified High Risk properties must arrive on site clean. Upon completion of the work and prior to exiting the field, all equipment, vehicles and PPE must be washed and disinfectant used. Sediment released from the washing process will be contained to prevent transportation to another field or water course.

Soil Borne Pathogens (i.e. Clubroot, Other)

For disinfection, staff and contractors are to use Virkon 5 gram tablets, mixed in accordance with the manufacturer's specifications. Virkon is biodegradable and no further treatment of the waste solution is required. The process for cleaning equipment and disinfecting is as follows:

a) Scrape off all heavy soil accumulations and pressure wash all surfaces that have been in contact with the soil.
b) Virkon disinfectant is to be mixed as one tablet for every 500 ml of water.
c) Virkon may be applied by spraying or the use of a mop, sponge or cloth to evenly apply onto the equipment surface. A minimum wetted contact time of ten minutes is required for all surfaces that have been treated.
d) To ensure maximum effectiveness, a **new** batch of solution will be prepared each day.
e) Any waste solution associated with disinfection is to remain on the field where it was used. It must be disposed of at least ten metres from a drain or drainage ditch.
f) Do not re-use a solution which has been used to soak contaminated tools or equipment.

Agricultural Biosecurity Standard Operating Procedures
Transmission Business Unit

Appendix I - Bipole III Transmission Project
Construction Cleaning/Disinfecting Protocols for Clubroot, Livestock and Other High Risk Categories

Livestock Operations

In livestock settings, or on fields where manure has been spread, the use of Synergize is required, mixed in accordance with the manufacturer's specifications. Synergize has known aquatic environmental impacts on aquatic fish invertebrates, oysters and shrimp. The application of the product will be contained in the field away from any watercourses to mitigate environmental impacts. Disinfecting with this product shall be done on the field away from any watercourse and leftover product will be disposed of at an approved facility. The process for cleaning equipment and disinfecting is as follows:

a) Scrape off all heavy soil accumulations and pressure wash all surfaces that have been in contact with the soil.
b) Synergize is to be mixed with a ratio of 4ml (Synergize) to 1L (water).
c) Synergize may be applied by spraying or the use of a mop, sponge or cloth to evenly apply onto the equipment surface. A minimum wetted contact time of ten minutes is required for all surfaces that have been treated.
d) Do not re-use a solution which has been used to soak contaminated tools or equipment.
e) To ensure maximum effectiveness, a **new** batch of solution will be prepared each day.
f) Any leftover product will be disposed of at an approved facility.

3. CONTACT INFORMATION

If there are any questions or concerns from the public related to biosecurity at Manitoba Hydro, contact the Project Information Line at 1-877-343-1631 or via email at environment@hydro.mb.ca.

APPROVAL

(Original signed by)

Sept. 22, 2016

Shane Mailey
Vice President
Transmission

Date

NOTE: This procedure will be reviewed annually by management. As conditions change or new information becomes available, this document may be revised prior to the annual review date. Printed copies are not controlled, so check with management for the latest version.

SUBJECT AREA: **Biosecurity**

REFERENCE: **SSC-IR-219 - Attachment**

QUESTION:

What situations are being referred to by "emergency situations"?

RESPONSE:

An emergency situation is a present or imminent situation or condition that requires prompt action to prevent or limit:

- the loss of life
- harm or damage to safety, health or welfare of people
- damage to property or the environment

In the context of biosecurity, if an emergency situation required access to agricultural land in order to prevent or limit the emergency, biosecurity procedures would be followed so long as they did not impede or delay the work required to address the emergency.

SUBJECT AREA: **Biosecurity**

REFERENCE: **SSC-IR-219 - Attachment**

QUESTION:

Which specific provisions of the Act are being referred to?

RESPONSE:

Section 24 of *The Manitoba Hydro Act* (Power of Entry) is being referenced, which gives Manitoba Hydro the right to enter upon any land to repair the works of the corporation.

SUBJECT AREA: **Biosecurity**

REFERENCE: **SSC-IR-219 - Attachment**

QUESTION:

How does Manitoba Hydro assess damage caused if biosecurity is compromised in "emergency situations" and compensate landowners for that damage?

RESPONSE:

Section 24(2) of the *Manitoba Hydro Act* sets out a process for compensation in cases where the power of entry prescribed in 24(1) is exercised and standard corporate procedures for assessing damage would be followed.