Answers to Undertakings Provided by Manitoba Hydro - #2

Undertaking # 3 (May 15, 2017 - Page 1081)

Advise what Manitoba Hydro projects line loss to be over transmission line.

The projected line losses for the Manitoba-Minnesota Transmission line over the preferred route assuming maximum loading: Line losses on D604I will vary from 4 MW (at today's maximum transfer level of 2175MW across our Manitoba – U.S. interconnections) to 17 MW (at the planned future maximum transfer level of 3058 MW across all MB-U.S. interconnections). The losses will be lower than the stated maximums for all other loading conditions. It is important to note though that, overall, MMTP reduces losses as a percentage of total transfer capability. The moment MMTP is added to the system, total losses over our MB-U.S. interconnections drop from 47MW to 31 MW – that is, from 2.16% to 1.43% of the total 2175 MW transfer south. Over time, as total transfers increase from 2175 MW to 3058 MW total losses rise to 59 MW, or 1.93% of total transfer. In general, adding lines to a transmission system reduces losses by spreading load around and avoiding higher concentrations of current on fewer lines.

Undertaking # 4 (May 15, 2017 – Page 1136)

Provide a definition of continual improvement in Manitoba Hydro's EMS.

Manitoba Hydro has adopted the definition from the ISO 14001:2015 Standard to mean a "recurring activity to enhance performance" in their EMS. As such, the EMS follows the principles of the Plan-Do-Check-Act management system cycle, which is intended to drive continual improvement.

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Undertaking # 5 (May 16, 2017 – Page 1318)

Advise Specific reference which identifies Manitoba Hydro as a whole to take into account indigenous worldviews and legal orders.

Manitoba Hydro recently announced in ENERGY, a Canadian energy publication, that one of Manitoba Hydro's four key strategic priorities is to respect and support Indigenous peoples in all aspects of our business.

As indicated by Ms. Coughlin, the Cultural and Heritage Resources Protection Plan is an example of an expressed written policy or practice requiring Manitoba Hydro to take into account indigenous worldviews. The Plan requires:

- heritage resource monitoring to include collaboration with interested appropriate communities in conducting groundtruthing investigations or mitigation of known sites;
- ongoing discussions with communities to identify culturally sensitive sites along the transmission line that will then be monitored prior to construction activities;
- inclusion, where appropriate, of these locations in the Construction Environmental Protection Plan mapbooks with identified recommended mitigation; and
- inviting these communities to participate alongside the archaeological team to assess and mitigate any cultural or heritage resources that may be discovered over the course of the project.

Undertaking # 6 (May 16, 2017 – Page 1356)

Review contribution agreement and advise if Hydro will maintain log and provide report to Peguis on use of project data.

Manitoba Hydro was asked by a Peguis First Nation representative to confirm that it will create a log that is maintained regularly each time their data is referenced.

Manitoba Hydro signed an agreement for the development of a land use and occupancy interview project for MMTP with Peguis First Nation. That agreement included clauses related to ownership of and access to information. Manitoba Hydro will adhere to the agreement made with Peguis First Nation as per data sharing and data ownership.

Answers to Informal Undertakings Provided by Manitoba Hydro - #2

Provide the number of easement agreements registered with Land Titles. (May 15, 2017 – Page 1049)

As of May 15, 2017, fourteen easements have been submitted for registration with the Land Titles Office. The remaining are in progress.

Would Manitoba Hydro consider adding an eighth principle, that has to do with respecting First Nations and Metis interests in the land affected by transmission projects? (May 11, 2017 – Page 915-916)

In Mr. Matthewson's verbal response to this question, he referred to the First Nations and Metis engagement process as a pillar of transmission line route planning. This engagement process is much broader than any individual siting principle. However, there may be an opportunity to further inform the transmission line routing process for application on future projects.

For this Project, the Alternate Corridor Model was originally developed through a process to gather feedback from technical data holders on a regional basis through workshops to inform development of the model. This process took place prior to the development of routes and the information shared was not project specific but was regional in nature.

Based upon prior feedback and earlier CEC hearings, Manitoba Hydro had understood that many communities were not interested in participating at such an early stage. There was, instead, a preference to conduct self-directed studies that are project specific. Further, it was understood that there was reluctance on the part of communities to share sensitive geospatial information that would then be used for multiple projects and activities and over a broad period of time. On that basis, for MMTP, Manitoba Hydro invited communities to conduct project-specific self-directed studies that informed routing decisions. Specific routing preferences were shared through ATK studies and preliminary mapping, as well as through the participation in the formal rounds of engagement. Within the Alternative Corridor Model, specific criteria reflect the land types and features that support elements that we understand to be valued by communities, such as high quality wildlife habitat. The alternate corridors developed for MMTP incorporated consideration of these features, and Project specific feedback received informed route development and evaluation

throughout transmission line routing. Manitoba Hydro will continue to work with communities to determine where in the process they would like to participate and share knowledge.

Manitoba Hydro has now heard from Participants in the current CEC hearing that some do have regional knowledge and may be willing to share it at an early stage to inform the development of alternative corridors. In Manitoba Hydro's commitment to be responsive and adaptive and enhance the transmission line routing process, it will endeavor to meet with representatives from First Nations, the Dakota people, the MMF and Indigenous organizations to discuss how to create an opportunity to gather existing regional data for use on future projects that communities would be willing to share. Depending on the nature of the existing data, this could then be incorporated into the model to inform the development of alternative corridors on future projects.

We'd like to hear Manitoba Hydro reflect on the process up to now. You have been at it for about two and a half years or so, and what have you learned that may have helped secure earlier engagement and a longer period of engagement. (May 9, 2017 – Page 480)

Once it has been determined by Manitoba Hydro that a project will be moving forward beyond conception, the environmental assessment processes, including associated engagement, can begin. Keeping that in mind, the Engagement Panel has reflected upon what has been successful over the almost four years of engagement to date, and what has been learned regarding securing early engagement and a longer period of engagement for large, complex future projects.

- Manitoba Hydro had previously heard that Indigenous communities did not wish to engage too early in a project, if there was insufficient information available for it to consider in a meaningful way. During the course of this hearing, Manitoba Hydro has heard from some Interveners that communities and organizations may wish to share information broadly in support of future assessments and routing processes. This early knowledge could include any data they may want to share and inform the criteria for the alternative corridor model or other models being used.
- Due to a long and often difficult history between it and Manitoba's indigenous communities, Manitoba Hydro understands that building relationships is crucial to both early engagement, and meaningful long term engagement, both of which are important to the development of projects with minimal environmental impacts. Over the last few years Manitoba Hydro has had the opportunity to work with

many of the communities involved in MMTP on other linear projects. The building of these relationships and dedicating specific individuals to engage with the community has helped foster a better relationship, from our perspective. When Manitoba Hydro has already developed a relationship with a community it can, in many instances, help facilitate the engagement process on future projects. In several cases this worked well on MMTP. In order to deepen relationships with communities on this and other projects, Manitoba Hydro will continue to work and communicate with communities beyond the In-service date of the associated projects.

- Manitoba Hydro learned that early engagement can be encouraged, and robust participation increased, by hosting events that are interesting, and interactive. By way of example, field visits held with Dakota Tipi First Nation and the ATKS Management Team (Black River First Nation, Long Plain First Nation and Swan Lake First Nation) were successful and helped Manitoba Hydro better understand site specific concerns and the importance of the land to the communities. In the future, it may be advisable to have more field visits with a greater number of communities, and to conduct them, and other similarly meaningful events, earlier in the process.
- Allowing technical discussions (such as routing methodology) to take place prior to, or in the course of
 formal negotiated arrangements also enables early engagement, as technical discussions do then not
 have to await conclusion of an agreement. This only occurred in a few situations on MMTP, but will be
 encouraged in future, complex project.
- Learning from past projects, Manitoba Hydro has clearly heard the desire of communities to be involved in all phases of a project, and in particular, an interest in environmental monitoring. Manitoba Hydro recognizes the need to continue to work with communities beyond this regulatory phase of the project, and hopes that working with communities to determine what their participation on monitoring should look like, will assist with building trust and understanding, and by extension, lead to a positive longer period of engagement on MMTP. For that reason, we will continue to pursue a new Indigenous Monitoring Working Group that can monitor the types of environment components of the project of concern to those involved.
- Manitoba Hydro has learned that recognizing and accommodating the unique needs of each community
 assists in encouraging and facilitating early engagement, and in developing a long-term positive
 relationship in the context of the project. While it has considered funding the same studies using

identical contribution agreements for each community to speed up the process, it is felt that variations within and between communities and with projects require a process that is flexible and not "one size fits all".

Manitoba Hydro understands there was a request for an I.R. number by Mr. Beddome. (May 16, 2017 – Page 1333, around line 19)

The I.R. number requested is MMF-IR-007.