

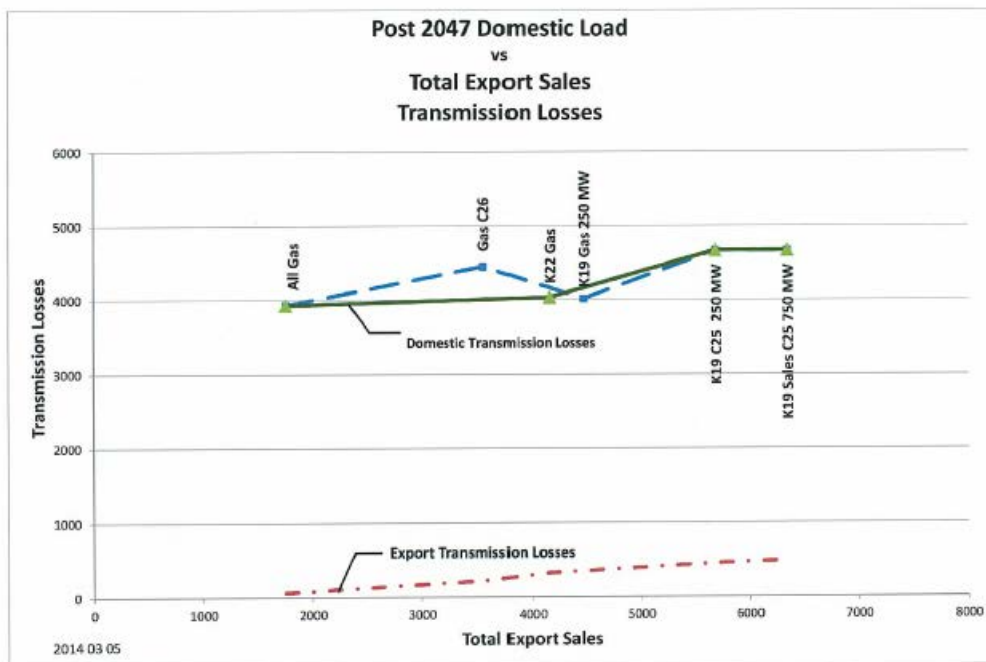
NEEDS FOR AND ALTERNATIVES TO (NFAT)

Manitoba Hydro’s Response to PUB Question #3

1. Confirm that post-2047 each of MH’s 8 Base Case scenarios assume a constant domestic load of 35,350 GWh
2. Confirm that post-2047 each of MH’s 8 Base Case scenarios have different Total Distribution & Transmission Domestic Load losses as follows:

All Gas	3927 GWh (11.1%)
K22 Gas	4033 GWh (11.4%)
Gas C26	4451 GWh (12.6%)
K19 Gas 250MW	3970 GWh (11.2%)
K19 C25 250MW	4597 GWh (13.0%)
K19 Sales C25 750MW	4668 GWh (13.2%)

3. Confirm that post-2047 MH’s export losses for each of the 8 Base Case scenarios were calculated at 9.0% ± of export sales
4. Confirm that the attached graph reflects the domestic and export losses associated with the cases above.



Response:

1. The information provided in Appendix 11.3 under the ref/ref/ref conditions after 2047 is based on a constant domestic load of 35,330 GWh which is modestly different than stated.
2. The post-2047 for each MH's 8 Base Case scenarios have Total Distribution & Transmission Domestic Load losses is modestly different than stated, and is as follows:

All Gas	3927 GWh (11.1%)
K22 Gas	4033 GWh (11.4%)
Gas C26	4451 GWh (12.6%)
K19 Gas 250MW	4015 GWh (11.4%)
K19 C25 250MW	4667 GWh (13.2%)
K19 Sales C25 750MW	4668 GWh (13.2%)

These losses include distribution losses, and as such would be expected to be larger than transmission losses associated with exports.

3. It is not confirmed that that post-2047 MH's export losses for each of the 8 Base Case scenarios were calculated at 9.0% ± of export sales. Instead, MH's export losses were calculated based on expected line loadings, and varied from 3% to 8% on average.
4. The points in the graph provided in Question 4 reasonably reflect the estimated Domestic losses as presented in Appendix 11.3 under Ref/Ref/Ref conditions. The purpose of using different symbols and connecting lines is not apparent.

The line illustrating Export Transmission losses appears reasonable for the data.