

2017/18 & 2018/19 ELECTRIC GENERAL RATE APPLICATION

Question from PUB Counsel #1 (email dated December 8, 2017)

Page 32 of Board counsel book of documents (Volume 4 = Exhibit PUB 42-4) shows the annual operating cost of home heating by electricity and high efficiency gas. a) What is the carbon levy that would make the cost of heating with a high efficiency gas furnace equivalent to electric resistance heating at today's rates? b) What is the carbon levy that makes the heating costs equivalent at projected 2027 rates?

Response:

- a) Based on current residential energy rates (as of November 1, 2017), the carbon levy required to make the cost of heating with a high efficiency natural gas furnace equivalent to electric resistance heating would be \$239.50 per tonne.
- b) Based on the projected 2027 residential energy rates, the carbon levy required to make heating with a high efficiency natural gas furnace equal in cost to electric resistance heating would be \$539.60 per tonne.

Assumptions:

- Energy consumption and carbon emissions are based on information provided in Manitoba Hydro's response to PUB/MH I-129a.
- The current residential electric and natural gas rates are \$0.08196 per kWh and \$0.2293 per cubic metre respectively.
- The forecast 2027 electric rate of \$0.1435 per kWh is from IFF16-Update.
- The forecast 2027 natural gas rate of \$0.2455 is based on the analysis presented in Manitoba Hydro's response to PUB/MH I-129c.