Ontario Energy Board | Commission de l'énergie de l'Ontario

BY EMAIL

August 29, 2023

Vanessa Innis
Manager, Strategic Applications – Rate Rebasing
Enbridge Gas Inc.
P. O. Box 2001
50 Keil Drive
North Chatham, ON N7M 5M1
EGIRegulatoryproceedings@enbridge.com

Dear Ms. Innis:

Re: Enbridge Gas Inc. (Enbridge Gas)
2024 Rebasing Application
Ontario Energy Board (OEB) File Number: EB-2022-0200

The OEB wants to better understand the energy requirements to distribute natural gas and hydrogen blends (up to and including 100% hydrogen) relative to natural gas (which is primarily methane).

In Undertaking J18.3, the OEB asked Enbridge Gas to calculate the additional fuel requirements required for compression purposes in order to deliver the same heat value of hydrogen in relation to the same heat value of methane. Enbridge Gas responded that it is unable to provide a response to the undertaking due to the complexity and time of performing the evaluation.

The OEB has reviewed Enbridge Gas's response to Undertaking J18.3 and clarifies the information request as follows:

(a) Recognizing that one cubic meter of hydrogen has approximately one third of the heat value of one cubic meter of methane at standard temperature and pressure, provide the work required, in joules, to compress hydrogen gas so that one cubic meter of hydrogen delivers the same heat value as one cubic meter of methane.

(b) In general terms, please comment on the amount of energy that would be required to compress one cubic meter of gas to meet the average operating pressures experienced in Enbridge Gas's intermediate, high, and extra-high pressure networks as the percentage of hydrogen gas blended with natural gas increases to 100%.

Please file a response to these questions by September 8, 2023.

Yours truly,

Nancy Marconi

Digitally signed by Nancy Marconi
Date: 2023.08.29 16:29:04 -04'00'

Nancy Marconi
Registrar

c: David Stevens and Dennis M. O'Leary, Aird & Berlis LLP
All Parties