

APPrO INTERROGATORY #1

INTERROGATORY

Reference:

- i) Exhibit D1 Tab 2 Schedule 3 paragraph 36 states:
For 2018 Enbridge has used a gross heating value of 38.42 MJ/m³ to convert quantities (i.e., GJ, Dth) into volumes (i.e., 103m³, MMcf). Quantities are the units specified in many of Enbridge's gas purchase and transportation service agreements, whereas Enbridge rates are volumetric. Enbridge also committed to use an updated monthly heat value for purposes of converting Direct Purchase deliveries from GJ's to m³ for Banked Gas Reporting.
- ii) Exhibit D1 Tab 2 Schedule 11 paragraph 39
For the purposes of developing its 2018 gas supply costs, the Company has used a conversion factor of 38.42 MJ/m³, which is more closely aligned with recent heat value observations made by the Company.
- iii) Exhibit H2 Tab 6 Schedule 1 Page 48 of the Rate Handbook states: The conversion factor is 37.74MJ/m³, which corresponds to Union Gas' System Wide Average Heating Value, as per the Board's RP-1999-0017 Decision with Reasons

Preamble: In Reference ii), Enbridge discusses the average heat content for system supplies. In Reference i) Enbridge also indicates that this same 38.42 MJ/m³ will be used for conversion of volumes in transportation agreements. Reference iii) mentions Union's system wide heat content. APPrO would like to understand the implications of these conversion factors for a direct purchase customer that has sourced natural gas from Dawn and delivered to Enbridge via Union and/or TransCanada.

- a) Please describe how Enbridge's system wide average heat content is calculated. In particular please note if this heat content is based on volume weighted average system purchases at the respective points of purchase or some other methodology.
- b) Please confirm that deliveries to Enbridge from both Union and TransCanada are energy based in GJs.
- c) Which heat content does Enbridge use for a direct purchase customer to convert energy to volume when the customer delivers gas to the Enbridge system from either Union and/or TransCanada? How does this heat content compare to the heat

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content used by the pipeline immediately upstream of the Enbridge distribution system.

- d) Please describe the implications, if any, and provide by way of numerical example, the impact on the ultimate energy delivered by Enbridge to a direct purchase customer using Enbridge's heat content referred to in c) above. For the numerical example, please assume that the direct purchase customer requires 1,000 GJs of energy to be delivered to its meter.

RESPONSE

a), b), and c)

As a part of the Settlement Agreement in the 2017 Rate Application (see EB-2016-0215 Exhibit N1, Tab 1, Schedule 1, page 10 of 15), EGD committed to update the heat value on a yearly basis for purposes of developing its gas supply plan, for Direct Purchase contract renewals and to update on a monthly basis the heat value used for the purposes of calculating the Banked Gas Account ("BGA") reporting.

On a monthly basis, EGD calculates an average heat value based upon volumes flowing into the distribution system via Union and the various TCPL gate stations for that month. As described in the Settlement Agreement, for the purposes of developing its gas supply plan the Company will use an updated heat value each year based upon the average heat value for the twelve month ending March 31st. This same average heat value will then be used to calculate individual "pool deliveries" as Direct Purchase agreements renew or new pools are established effective July 1st of every year.

On a monthly basis the average heat value of the deliveries into the EGD system will be used for purposes of converting a Direct Purchase customers delivery in GJ's to m³ for BGA reporting. This will provide a better representation of the actual consumption in that particular "pool".

- d) The Company does not have the ability to determine the location of each individual customer delivery and measure the actual heat value, nor can it calculate the heat value of the deliveries of individual Direct Purchase customers. The Company believes that the Settlement Agreement approach for calculating BGA balances is a better representation of deliveries and consumption compared to the old method of using 37.69 MJ / m³.

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