

April 28, 2023

Ontario Energy Board
By electronic filing and e-mail

Attn: Nancy Marconi, Registrar and Board Secretary

Dear Ms Marconi:

Re: EB-2022-0200, EGI 2024 Rebasing - GEC Interrogatories to Intervenors

Please find GEC's interrogatories to Board Staff and IGUA experts attached.

Sincerely,

A handwritten signature in black ink, appearing to read "David Poch". The signature is written in a cursive style with a large, stylized initial "D".

c: All Parties

GEC IR to IGUA on Depreciation

M5.GEC-1

Reference: Exhibit M – IGUA – Depreciation, Page 10: “Fundamentally, depreciation is an accounting concept that seeks to ensure the future economic values of an asset are consumed over a systematic period.⁵

5. A systematic period is a period that is reflective of the consumption of the value of the assets over the expected useful life. Generally, this systematic period is on a straight-line basis and thus does not vary significantly from year-to-year.

Background:

Enbridge has filed evidence produced by Guidehouse which provides two illustrative futures (‘Electrification’ and ‘Diversified’) that are postulated to conform to an energy transition that achieves net zero by 2050. The peak energy delivery and peak capacity impacts of the two scenarios can be found at ex. 1.10.5 attachment 2 Figures 10 and 11 (see below). In the ‘Electrification’ scenario the move off gas is very significant but even in the ‘Diversified’ scenario, given the fact that hydrogen has approximately 1/3rd the energy content of methane, the system is projected to meet a significantly reduced peak energy demand by 2050 (as evidenced by Guidehouse Figure 10 vs Figure 11). Further, Guidehouse (at page 30) finds that by 2050 85% of all buildings will convert to electric heating systems in the electrification scenario and 40% will do so in the diversified scenario. Accordingly, the impact on annual energy services delivered by the gas system to customers is even greater than the impact on peak energy delivery and there may be far fewer customers left ‘holding the bag’.

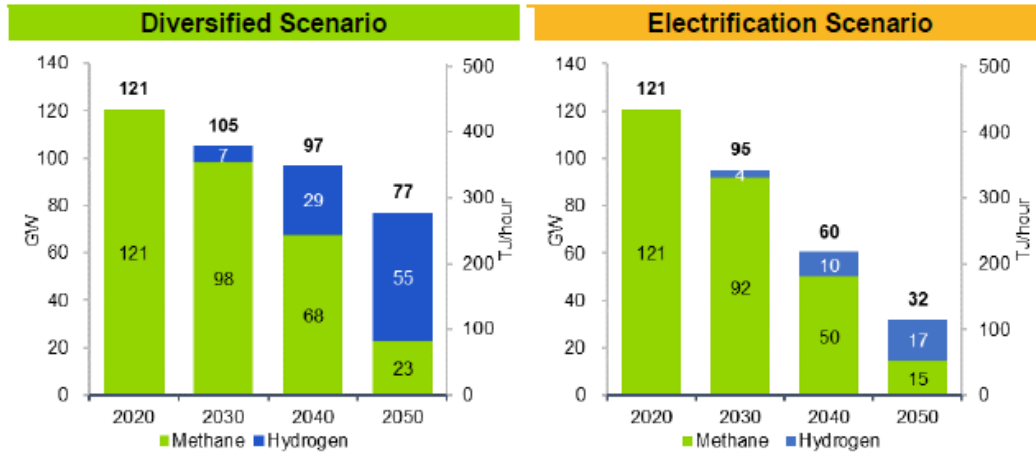
Question:

- i. Does Mr. Madsen agree that the economic value of an asset can change if it provides significantly different level of service and value to its users over time?
- ii. Please assume that by 2050 Enbridge’s assets currently in service will accommodate significantly fewer customers at peak than at present and that a large portion of customer annual energy needs will move off gas, and comment on the relative merits of ALG, ELG, EPH, Capacity-based Units of Production, and Energy-based Units of Production depreciation methodologies as a means of achieving inter-generational equity given those assumptions.



Figure 10. Gas System Peak Demand⁵⁹

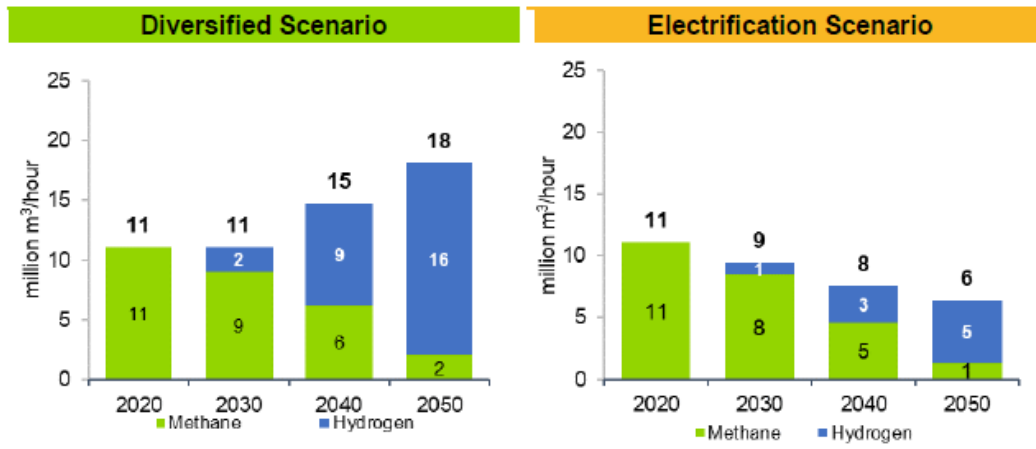
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While the gas system peak declines for both scenarios in energy terms, the volumetric gas system peak rises significantly in the Diversified scenario. This is because hydrogen has a lower energy density than methane, so more volume is needed to provide the same amount of energy. This trend, along with the volumetric gas system peak for the Electrification scenario can be seen below in Figure 11.

Figure 11. Volumetric Gas System Peak Demand⁵⁹

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GEC IR to Board Staff on Depreciation

M1.GEC-1

Reference: Exhibit M1 – OEB Staff – Depreciation InterGroup discusses an example, illustrated in its Figure 1, where the assets in service appear to provide the same level of service throughout the period.

Background:

Enbridge has filed evidence produced by Guidehouse which provides two illustrative futures ('Electrification' and 'Diversified') that are postulated to conform to an energy transition that achieves net zero by 2050. The peak energy delivery and peak capacity impacts of the two scenarios can be found at ex. 1.10.5 attachment 2 Figures 10 and 11 (see below). In the 'Electrification' scenario the move off gas is very significant but even in the 'Diversified' scenario, given the fact that hydrogen has approximately 1/3rd the energy content of methane, the system is projected to meet a significantly reduced peak energy demand by 2050 (as evidenced by Guidehouse Figure 10 vs Figure 11). Further, Guidehouse (at page 30) finds that by 2050 85% of all buildings will convert to electric heating systems in the electrification scenario and 40% will do so in the diversified scenario. Accordingly, the impact on annual energy services delivered by the gas system to customers is even greater than the impact on peak energy delivery and there may be far fewer customers left 'holding the bag'.

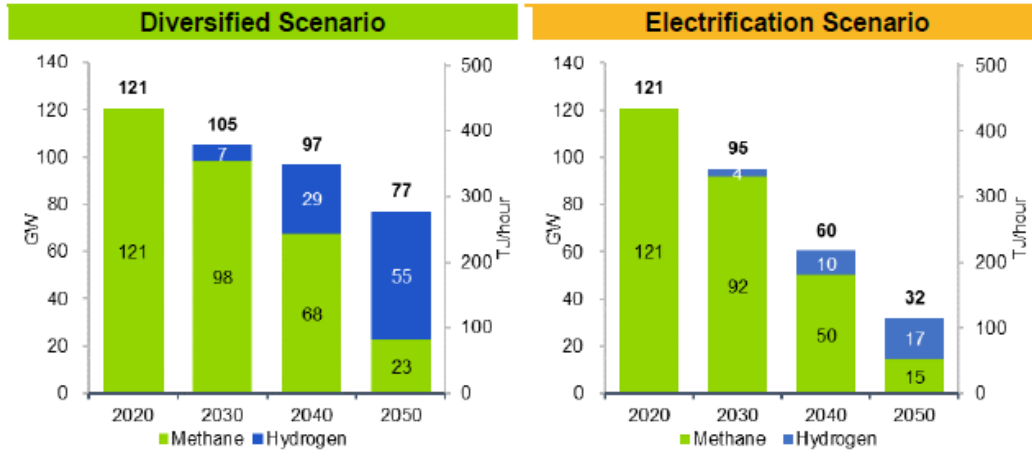
Question:

- iii. Does InterGroup agree that the economic value of an asset can change if it provides significantly different level of service and value to its users over time?
- iv. Please assume that by 2050 Enbridge's assets currently in service will accommodate significantly fewer customers at peak than at present and that a large portion of customer annual energy needs will move off gas, and comment on the relative merits of ALG, ELG, EPH, Capacity-based Units of Production, and Energy-based Units of Production depreciation methodologies as a means of achieving inter-generational equity given those assumptions.



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