ENBRIDGE GAS INC. 2024 REBASING APPLICATION – PHASE 2

EB-2024-0111

ONTARIO ENERGY BOARD STAFF INTERROGATORIES ON GEC-ED EVIDENCE

EXHIBIT M1

AUGUST 23, 2024

M1.Staff-1

Ref: GEC-ED Evidence, p.8,11-12; Exhibit 1, Tab 17, Schedule 1, pp. 2-17

Energy Futures Group notes that the Massachusetts Department of Public Utilities has required utilities seeking pilot funding for renewable natural gas or hydrogen blending to explain why the end use is "hard to decarbonize" by other means (i.e., difficult to electrify). Energy Futures Group notes that electrification is currently less suitable for most higher-heat industrial processes and proposes that the logical choice for a targeted energy transition technology fund (ETTF) would be low-carbon fuel for high-heat industrial processes.

a) Please provide references or links to any studies Energy Futures Group is aware of that examine which sectors and end uses currently served by natural gas are hard to decarbonize, based on technical and economic factors, including those that support Energy Futures Group's statement that high-heat industrial applications are the most promising sector/end use to target.
b) Based on the above referenced studies and Energy Futures Group's expertise, are there any other sectors/end uses/applications Energy Futures Group believes are hard to decarbonize and would potentially be suitable for funding through the ETTF?
c) Would Energy Futures Group's proposal for a targeted ETTF focused on low-carbon fuel for high-heat industrial processes encompass technologies in all of the following areas: supply of low-carbon fuel, distribution to industrial customers, end use equipment? Why or why not?
d) Would Energy Futures Group's proposal for a targeted ETTF encompass carbon capture utilization and storage technologies and efficiency improvements to end use equipment, for high-heat industrial applications (in addition to utilization of low-carbon fuels)? Why or why not?
e) Please comment as to Energy Futures Group's views as to whether technology development related to Enbridge Gas's Asset Life Extension proposal (i.e., supporting asset life extension of gas transmission and distribution infrastructure

to avoid pipeline replacements and stranded assets for remaining customers), could be an appropriate area of focus for funding through the ETTF.

M1.Staff-2

Ref: GEC-ED Evidence, p.20, 30; Exhibit I.4.2-ED-52 (e); Clean Fuel Regulations: Specifications for Fuel LCA Model CI Calculations; Exhibit 4, Tab 2, Schedule 7, p.32

Energy Futures Group recommends that the Low-Carbon Energy Program should procure renewable natural gas (RNG) based on the cost per tonne of avoided lifetime greenhouse gas emissions, using the United States Environmental Protection Agency's GREET model or similar life-cycle basis methodology to calculate life-cycle carbon intensity (CI). Enbridge Gas has previously suggested that the method or tool to calculate the CI of RNG projects should comply with the requirements of the program to which RNG projects are seeking to be a registered participant, noting that RNG projects seeking to create Clean Fuel Regulations (CFR) credits must determine the CI of their project using Environment and Climate Change Canada's OpenLCA model. This methodology is documented in more detail in the document linked above. Enbridge Gas has also proposed that it may purchase RNG with CFR credits, if the benefits, less expenses, generated from CFR credit sales will reduce the incremental cost of low-carbon fuel.

a) Is Energy Futures Group familiar with the CI methodology used for the Clean Fuel Regulations, and if so, does Energy Futures Group have any technical concerns with using this methodology more generally as the basis for any calculations of CI for RNG?
b) From a policy perspective (i.e., separate from any concerns noted in Energy Futures Group's response to part(a) regarding methodologies used to calculate CI), please describe why Energy Futures Group's proposal that RNG should be procured based on the cost per tonne of avoided lifetime greenhouse gas emissions is preferable to Enbridge Gas's proposal to incorporate the economic value of CFR credits into its procurement decisions.

M1.Staff-3

Ref: GEC-ED Evidence, pp.14-16; Exhibit I.4.2-ED-48

Energy Futures Group states RNG procurement only delivers a one-time reduction in emissions, and that in contrast to RNG, investments in energy efficiency, electrification and other measures typically provide emission reductions for decades. Energy Futures

Group compares the cost of emissions reductions from RNG versus demand-side management (DSM), and also proposes capping the price paid for RNG at $25.58/GJ.

a) Please confirm that the estimate of the costs of emissions reductions from DSM referenced by Energy Futures Group already accounts for the longer time period over which DSM measures deliver emissions reductions. If confirmed, is Energy Futures Group suggesting that there are other reasons why the shorter time period of emissions reductions achieved from RNG procurement (relative to DSM) is undesirable?
b) Is Energy Futures Group proposing that the cost for any RNG procurement be capped at $25.58/GJ, or that the average cost of Enbridge Gas's RNG supply be capped at this level?

M1.Staff-4

Ref: GEC-ED Evidence, pp.19-20; Exhibit I.4.2-Staff-37

Energy Futures Group states that "to reduce emissions, RNG procurement needs to be sourced from the development of new capacity, and not merely be repurposed or re-contracted from pre-existing RNG uses." Energy Futures Group also recommends prioritizing the development of Ontario-based RNG sources, and notes that Vermont Gas is required to purchase the transmission pathway to its distribution system in Vermont before it can claim any GHG emission reduction from procured RNG.

a) Does Energy Futures Group believe that physical transmission of RNG (such as the Vermont Gas example) is necessary to address concerns regarding additionality/incrementality of greenhouse gas emissions reductions from RNG, or can this concern be addressed through regulatory or contractual arrangements?
b) Please comment on Enbridge Gas's responses to Exhibit I.4.2-Staff-37, regarding double-counting, additionality considerations, and the information provided to potential voluntary participants in the Low-Carbon Voluntary Program. Does Energy Futures Group agree with Enbridge Gas's proposals on these issues, or have any additional recommendations as to whether and how to modify the Low-Carbon Voluntary Program to address these issues?

M1.Staff-5

Ref: GEC-ED Evidence, p.23; Exhibit I.1.17-ED-31

Energy Futures Group recommends that Enbridge Gas consider strategies for addressing situations where most customers are prepared to fully electrify but a very small number or portion are not, as part of its system pruning pilot proposal.

Is Energy Futures Group aware of any relevant learnings from electrification programs/pilots in other jurisdictions that may address this issue? Please provide any relevant learnings regarding either utility strategies to address this circumstance, or regulator actions to address concerns regarding a gas distributor's obligation to provide service (i.e., requirements similar to section 42(2) of the *OEB Act* – see Enbridge Gas's response in Exhibit I.1.17-ED-31).