

May 27, 2020 VIA E-MAIL

Christine E. Long Registrar and Board Secretary Ontario Energy Board Toronto, ON

Dear Ms. Long:

Re: EB-2019-0294 Enbridge Gas Inc.

Low Carbon Energy Project - Rate Rider and Leave to Construct Interrogatories of the Vulnerable Energy Consumers Coalition (VECC)

Please find attached the interrogatories of VECC in the above-noted proceeding. We have also directed a copy of the same to the Applicant.

Yours truly,

Mark Garner

Consultants for VECC/PIAC

Copy:

EGI Regulatory

EGIRegulatoryProceedings@enbridge.com

REQUESTOR NAME VECC

TO: Enbridge Gas Inc. (EGI or Enbridge)

DATE: May 27, 2020 CASE NO: EB-2019-0294

APPLICATION NAME Low Carbon Energy Project (LCEP)

VECC-1

Reference: Exhibit B, Tab 1, Schedule 1, page 2

Enbridge notes: "The TSSA indicated that they will act as a technical reviewer on behalf of the Ontario Energy Board for the LTC application if requested."

- a) Please explain how Enbridge envisions coordination between the TSSA and OEB to advance and monitor this project? For example, is Enbridge seeking a coordinating committee from the two agencies?
- b) Please explain what form (frequency and type) of reporting is anticipated for this project. Would all reports be made available publicly or does Enbridge anticipate developing its own intellectual property from this project?
- c) What form of consumer or public input will be sought after a trial period and analysis of the results?

VECC-2

Reference: Exhibit B, Tab 1, Schedule 1, page 3

a) How was the 97-120 carbon dioxide equivalent estimate for the project calculated (please include assumptions).

VECC-3

Reference: Exhibit B, Tab 1, Schedule 1, pages 4, 18

"Enbridge Gas is proposing to acquire hydrogen in a manner that keeps ratepayers cost-neutral.""There will be no impact to customer bills as the cost of hydrogen will be the same as the cost of traditional natural gas"

- a) Please explain the manner in which ratepayers are kept cost neutral when acquiring the hydrogen supply.
- b) Given the limited number of suppliers of hydrogen (single sourced in this project) how is the price for hydrogen established?
- c) Does Enbridge Gas have a supply contract with 2562961 Ontario for

hydrogen and other services? If so please provide the contract or if for reasons of confidentiality this cannot be done outline the terms of the contract.

d) Does 2562961 Ontario Limited have a generator or other regulatory licence issued by the Ontario Energy Board?

VECC-4

Reference: Exhibit B, Tab 1, Schedule 1, page 10

- a) As the Clean Fuel Standard regulations are at an early stage and not expected to come into force until 2023 why does EGI believe that hydrogen blending will be a means of compliance or credits under a future CFS policy?
- b) Should this not happen or the project otherwise is abandoned what financial risk might accrue to ratepayers?

VECC-5

Reference: Exhibit B, Tab 1, Schedule 1, page 16

The evidence states: "Given that the Proposed Facilities are required to enable the Company to reduce the GHG footprint of its utility gas distribution system; these facilities should be fully attributed to system reinforcement and general distribution growth and managed within the rolling project portfolio in accordance with Enbridge Gas's normal business practice."

a) Given the unusual nature of the project and the fact that it is a pilot project from which presumably the Utility hopes to gain a better understanding of both the technical and financial challenges and benefits, why would it not be preferable to account for this project discretely and outside of the rolling project portfolio?

VECC-6

Reference: Exhibit B, Tab 1, Schedule 1, page 4

a) Please provide a copy of the HYREADY guidelines followed for this project.

VECC-7

Reference: Exhibit B, Tab 1, Schedule 1, Attachment 1, page 4

- a) Please provide the results of the CGA/AGA literature search aimed at understanding the impacts of adding hydrogen to natural gas.
- b) Please provide the studies which Enbridge relied upon to show that hydrogen blending would be safe at the levels contemplated and would not have a detrimental effect on customer of utility equipment.

VECC-8

Reference: Exhibit B, Tab 1, Schedule 1, Attachment 1, page 16

The following Ontario Regulations are applicable to the project:

- Ontario Regulation (O. Reg) 210/01 Oil and Gas Pipeline Systems
- FS 238-18 Oil and Gas Pipeline systems code adoption document,
 Dated: 15th February 2018
- a) Please provide the Ontario regulations referenced.

VECC-9

Reference: Exhibit B, Tab 1, Schedule 1, page 10 / Exhibit F, Tab 1, Schedule 1, Attachment 1

a) Enbridge explains that it is proceeding with constructing loop S1 or Phase 1 of the project. The public consultation identifies Phase 2 as approximately 5.5 km of pipeline in the Cachet and Rodick Road-Unionville area. Phase 2 is also discussed in some detail at Exhibit F (letter of January 4, 2019 to Ministry of Energy, Northern Development and Mines). Please explain when Phase 2 is contemplated and under what condition it will proceed.

VECC-10

Reference: Exhibit C, Tab 1, Schedule 1, Attachment 4 /Exhibit E, Tab 1, Schedule 1, page 2

- a) Please update of the status of acquisition permits as shown in Table 1 of Exhibit E.
- b) Has Enbridge received the required easements from the City of Markham and Hydro One Networks?

VECC-11

Reference: Exhibit C, Tab1, Schedule 1, Attachment 4, page 53

- a) Enbridge states that it has completed a study on appliances in the blended gas distribution area. Please provide this study.
- b) Has Enbridge undertaken a study or reviewed an existing study on the impact of hydrogen fuel on common household natural gas appliances (i.e. furnaces, stove-ovens, water tanks and clothes dryers)? If yes please provide that study or studies.

VECC-12

Reference: Exhibit B, Tab 2, Schedule 4 / Exhibit D, Tab 1, Schedule 1, page 7

- a) Please confirm or correct that hydrogen at certain concentrations is known to have a detrimental impact (embrittlement) on some types of steel pipe.
- b) Please explain why this issue is not a concern with respect to natural gas burners and other steel-based customer equipment.
- c) Enbridge notes that it will be testing pipeline additions "in accordance to guidelines from the Canadian Hydrogen Installation Code." What incremental requirements are incorporated in this Code that would not normally be done if the pipeline was anticipated only to carry unadulterated natural gas?

VECC-13

Reference: Exhibit B, Tab 2, Schedule 4 / Exhibit D, Tab 1

- a) Please confirm (or correct) that hydrogen has a different permeation coefficient than methane?
- b) Given that hydrogen is a much smaller molecule than methane does it have a higher tendency to leak (at seals, meters etc.) than unadulterated (methane) natural gas? If so, please explain what steps are taken to mitigate this effect.
- c) Please explain what impact hydrogen may have on the accuracy of existing gas meters.
- d) Please explain what steps will be taken during the pilot program to understand the impact of hydrogen blending on distribution pipes, meters and customer equipment.

VECC-14

Reference: Exhibit D, Tab 1, Schedule 1, page 13

a) Please clarify which line items (1-10) in Table 8 attract a 40% contingency and which attract a 25% contingency.

b) Please explain more fully what "specialized" equipment or design requirements are uncertain and therefore the costs less certain.

End of document