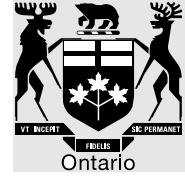


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BY E-MAIL

December 17, 2021

Christine E. Long
Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Long:

**Re: Enbridge Gas Inc. – EB-2021-0002
Application for new DSM Framework and 2022-2027 DSM Plan**

In accordance with Procedural Order No. 3, please find attached OEB staff's interrogatories related to evidence filed by intervening parties in the above noted proceeding.

Yours truly,

Josh Wasylyk
Project Advisor – Application Policy & Conservation

cc: All parties in EB-2021-0002

**OEB Staff Interrogatories on Intervenor Evidence
2022-2027 Demand Side Management Framework and Plan Application**

**Enbridge Gas Inc.
EB-2021-0002**

December 17, 2021

Evidence submitted by Building Owners and Managers Association (Enerlife Consulting Inc.)

Issue 10(f) – Are Enbridge Gas’s proposed energy performance program offerings appropriate?

10f.OEB Staff.1.BOMA

Reference: Exhibit L.BOMA, p.5

A reference to the potential risk of continuing to rely on traditional cost-effectiveness results notes the possible inconsistency with the achievement of broader climate and energy objectives that take account broader societal costs and benefits.

- a) Please discuss the approach to assessing cost-effectiveness from the leading P4P programs reviewed in development of this report.
- b) Please discuss if you are aware of any exemptions to traditional cost-effectiveness thresholds for P4P programs.
- c) Please discuss alternative methods for ensuring value for money from P4P programs if traditional cost-effectiveness tests are not used.

10f.OEB Staff.2.BOMA

Reference: Exhibit L.BOMA, p. 4-6

Exhibit I.10f.EGI.STAFF.61

Various program designs and ideal characteristics were discussed, including buildings with consistent schedules (grocery, big box and commercial offices), buildings with regular unoccupied hours or downtime, and buildings that are managed by a single individual that can make energy and operation decisions for multiple sites.

Recommissioning is also discussed. Your report also notes Enbridge Gas’s support or

recent involvement in various similar programs, including Race to Reduce, Greening Health Care and Sustainable Towers Engaging People.

In an interrogatory response, Enbridge Gas explained how the program can scale in the future, indicating that consideration of customer enrollment, participant engagement levels and feedback from participants would be important considerations.

- a) Please discuss if Enbridge Gas's approach of initially offering the program on a pilot basis and only targeting schools is reasonable. In your response, please comment on the level of uncertainty related to potential participation in the pilot program by schools, if any, and the level of natural gas savings that can reasonably be expected from the pilot.
- b) Based on your experience and understanding of the evolution and current status of similar P4P programs, please comment on the likelihood of success of launching the program as a full standalone offering, rather than on a pilot basis. In your response, please comment on what reasonable participation and natural gas savings assumptions could be expected for a full P4P offering that was available to a broader group of potential participants that had access through various streams to allow as many customers to participate as possible.
- c) Enbridge Gas noted that depending on the size and complexity of building archetypes, costs associated with key elements such as modeling and financial incentives could vary widely. Please discuss any cost differences you have experienced when delivering a P4P program to different market segments other than schools.

10f.OEB Staff.3.BOMA

Reference: Exhibit L.BOMA, pp. 9-11

Exhibit I.10f.EGI.STAFF.63

There were a number of programs and key program components and considerations discussed throughout the report and summarized in Table 1 beginning on page 9.

- a) Please discuss specific changes/additions that you believe should be made to Enbridge Gas's proposed program to ensure it is as successful as possible based on your experience with P4P programs and the review of other leading programs throughout North America.
- b) Please comment on the effectiveness of the incentives proposed by Enbridge Gas in engaging customers and providing motivation to participate (\$0.30/m³ based on incremental savings relative to baseline and \$0.20/m³ based on total

gas savings at the end of the project term if customer achieved 20% reduction target).

- c) Enbridge Gas noted in its interrogatory responses that it is exploring a collaborative program with the IESO's Energy Performance Program. Please discuss the ideal structure of a program between Enbridge Gas and the IESO – should it be collaborative in nature (alignment on program eligibility, incentives and other program specifics, but still offered by each program administrator separately) or should it instead be a fully integrated offering (one where the customer is able to consider and address all efficiency opportunities and is not aware that there are two separate entities responsible or that program funding and performance is measured separately). In your response, please highlight any benefits or drawbacks to either approach.

Evidence submitted by Environmental Defence (Dr. McDiarmid)

Issue 10(j) – Is Enbridge Gas’s proposed low carbon transition program appropriate?

10j.OEB Staff.1.ED.1

Reference: Exhibit L.ED.1, p.9

Exhibit I.10h.EGI.STAFF.77

The report discusses various heat pump heating systems for residential users and notes that hybrid heating systems can help support a low carbon transition in the short term but in the long term, hybrid heating systems that rely on gas are likely to be incompatible with many net zero plans.

Enbridge Gas included some more details of its research into the various heat pump technologies in its interrogatory responses.

- a) Please discuss the implication of missing the opportunity to convert customer heating systems to electric cold climate heat pumps at the time of natural replacement of a traditional gas furnace heating system. As part of your response, please include any analysis that has been completed that shows the GHG emissions that could have been reduced and any cost savings for the customer.
- b) Please briefly discuss if and how your analysis considered additional costs customers may be required to incur to transition from traditional gas furnace heating systems to an electric cold climate heat pump system, such as retrofits to duct systems, and any related issues to correct sizing and balance points.
- c) Please discuss and show the costs to convert from a hybrid heating system to a cold climate electric heat pump in order to help achieve the goal of net zero. In your response, please show the costs and appropriate timing of converting a high efficient natural gas furnace into a hybrid system and later converting that hybrid system to a cold climate electric heat pump vs simply converting from a high efficient natural gas furnace to a cold climate electric heat pump. In what circumstances would the first option be preferable to the second option?
- d) Please indicate in what circumstances, if any, it would be most cost-effective from the customer’s perspective to install a gas heat pump system.

10j.OEB Staff.2.ED.1

Reference: Exhibit L.ED.1, p.9

The report briefly discusses the cost-effectiveness of heat pumps for commercial customers.

- a) Please indicate and discuss if it would be cost-effective for Enbridge Gas to include commercial customers in its Low Carbon Transition program, to incentive and educate commercial customers and energy contractors to install cold climate electric heat pump systems.

**Evidence submitted by Green Energy Coalition and Environmental Defence
(Energy Futures Group)**

Issue 6 – Does Enbridge Gas’s proposed budget, including program costs and portfolio costs result in reasonable rate impacts while addressing the OEB’s stated DSM objectives in its letter issued on December 1, 2020, including having regard to consumers’ economic circumstances?

6.OEB Staff.1.GEC/ED.1

Reference: Exhibit L.GEC/ED.1, pp. 13-14

2019 Integrated Ontario Electricity and Natural Gas Achievable Potential Study, Navigant Consulting Ltd., September 13, 2019, p. 116

The report discusses the various scenarios that were examined as part of the 2019 Achievable Potential Study and notes that the “constrained potential” modeled in Scenario A used a budget of \$80 million. In the 2019 APS, it provides additional information on the budgets for each scenario, noting that “the program costs in each achievable scenario presented below represent the cost of energy efficiency program portfolios to non-free rider participants....When proposing a budget for a future DSM or CDM portfolio or program based on the potential scenarios included in this potential study, a program delivery agent should consider the incremental program costs to account for future program net-to-gross ratios and fixed portfolio overhead costs with supporting rationale and evidence.” The gross budget for the DSM potential in Scenario A was \$117M, based on a net-to-gross ratio of 75% and overhead costs of \$10M.

- a) Please discuss if your analysis changes at all using the gross, not net, Scenario A budget.

6.OEB Staff.2.GEC/ED.1

Reference: Exhibit L.GEC/ED.1, pp. 16-17, 34-40

The report discusses different options to expand DSM budgets while being mindful of rate impacts, including program design changes and eliminating programs and shifting funds elsewhere within the portfolio.

- a) Please provide your recommendation on changes to the overall DSM budget and how that budget should be allocated to the various programs you support. As part of your response, please include a brief discussion on the general level of natural gas savings from each program/sector that can be expected, even at a high level, to provide context for any budget changes.

Issue 13 – Are Enbridge Gas’s proposed updates to the treatment of input assumptions, cost-effectiveness screening, and avoided costs appropriate?

13.OEB Staff.3.GEC/ED.1

Reference: Exhibit L.GEC/ED.1, pp. 41-43

The report recommends that the OEB adopt the use of a real discount rate of 0.5% as opposed to the real discount rate of 4% as proposed by Enbridge Gas.

- a) Using the 2020 Annual Verification results, please provide an example of the impact on cost-effectiveness and NPV of benefits of switching from a real discount rate of 4% to 0.5%, as proposed.
- b) Please provide some examples of longer-lived measures that may not receive the attention they deserve based on a higher discount rate.

Evidence submitted by Small Business Utility Alliance (Green Energy Economics Group)

Issue 10(c) – Are Enbridge Gas’s proposed programs offerings for commercial customers appropriate?

10c.OEB Staff.1.SBUA.1

Reference: Exhibit L.SBUA.1, p.4

Exhibit L.SBUA.1, p.18

The report recommends that a sub-group of commercial customers called microbusinesses, those that use less than approximately 25,000 m³ per year, be highlighted for program delivery. The report also notes that it appears commercial customers will not be able to access the residential program.

- a) Please discuss if your analysis and experience in other jurisdictions has found that the smallest of business customers can participate in the residential efficiency programs, or solely business programs.

10c.OEB Staff.2.SBUA.1

Reference: Exhibit L.SBUA.1, p.11

As part of the overview of best practices, offering financing at zero interest and including the ability for on-bill repayment to encourage comprehensive retrofits and deeper savings was discussed.

- a) Please provide references and discuss the program parameters of those jurisdictions that offer this feature in its commercial program.

10c.OEB Staff.3.SBUA.1

Reference: Exhibit L.SBUA.1, p.15

When reviewing other small business DSM strategies, FortisBC was highlighted. The report notes that its savings are projected to increase from 6.0 m³ in 2018 to 21.6 m³ in 2022. The report notes that part of FortisBC’s program includes identifying inefficiencies at participant facilities and conducting an on-site walkthrough.

- a) Please discuss if your research found any causes for the significant increase in savings projections in 2022 compared to 2018 – was this due to increased funding, a change in approach, the type of customers targeted, certain measures being highlighted?
- b) Please discuss if the FortisBC program relies on participants self-enrolling or if FortisBC takes a more proactive approach and reaches out directly to customers with higher savings potential.

10c.OEB Staff.4.SBUA.1

Reference: Exhibit L.SBUA, p.17 & 21

When discussing optimal program design, you note that the prescriptive measure list is too restrictive and does not include many measures that would help a large percentage of small businesses, such as adaptive thermostats. A list of recommended measures is included on p. 21.

- a) Please discuss the optimal incentive level that should be provided for all prescriptive measures, including those currently proposed to be included in Enbridge Gas's program and the additional measures listed on p. 21. Please reference incentive levels from other leading jurisdictions where available.