

ENBRIDGE GAS INC.

Answer to Interrogatory from  
Anwaatin Inc. (Anwaatin)

Interrogatory

**Issue 12**

Reference:

Updated Application, Exhibit D, Tab 1, Schedule 3, page 11  
Updated Application, Exhibit E, Tab 3, Schedule 1, pages 1-9

Question(s):

Preamble: EGI's 2023-2024 target for the installation of residential heat pumps under the Low Carbon Transition Program's Residential Low Carbon offering is 2,123, with a lower band of 1,061.5 and an upper band of 3, 184.5.

EGI notes that the Low Carbon Transition Program is "designed to support the plans of the federal government to bring these types of low carbon technologies to market. The Low Carbon Transition program specifically focuses on expanding the deployment of heat pump technologies".

EGI's Residential Heat Pump Program offering is available to all residential customers and HVAC contractors, subject to eligibility.

The *Access to Natural Gas Act*, 2018 and the Board's report on "Potential Projects to Expand Access to Natural Gas Distribution"<sup>1</sup> (the Report) provides a framework for funding natural gas expansion projects and identifies proposed projects for expansion. Many First Nations await natural gas expansion to their communities and are forced to use more carbon intensive energy alternatives.

- a) Please file any and all analysis EGI has performed in connection with the number of on-reserve and off-reserve First Nation residents that will make use of the Residential Heat Pump Program offering. If EGI has not undertaken any such analysis, please provide estimates and explain why no such analysis was performed.

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<sup>1</sup> OEB Report to the Minister of Energy, Northern Development and Mines and to the Associate Minister of Energy "Potential Projects to Expand Access to Natural Gas Distribution" in EB-2019-0255 (10 December 2020) available online at: <<https://www.oeb.ca/sites/default/files/OEB-Natural-Gas-Expansion-Report-to-Ministers-20201030.pdf>>. Attached as Annex A.

- b) Please indicate whether EGI is aware of and has considered the many challenges associated with providing the Residential Heat Pump offering to its on-reserve residential customers, including difficulty in obtaining services from HVAC contractors in remote and near-remote First Nations? If WGI is not aware or has not considered these challenges, please explain why not and indicate how EGI will ensure equal access to the Heat Pump Program offering for its on-reserve residential customers.
- c) Please indicate whether EGI has considered providing additional support or training to HVAC contractors that may offer their services to EGI's on-reserve residential customers? If not, would EGI consider such a program to ensure equal access to its DSM programming for its on-reserve customers? If EGI would not consider such a program, please explain how EGI will ensure equal access to its Low Carbon Transition Program for its on-reserve customers that are unable to obtain the services of qualified HVAC contractors.
- d) How does EGI propose to monitor and report on the effectiveness of its Low Carbon Transition Program for Indigenous customers? Please provide an example or examples.
- e) Please indicate whether EGI has considered offering DSM programming, such as the Low Carbon Transition Program, to First Nations and other Indigenous communities waiting for natural gas expansion as a means to assist these communities in reducing their GHG emissions and providing them with associated GHG-related savings? If not, please provide and explain the perceived barriers that exist for expanding DSM programming to communities on the list of proposed projects found in the Report provided in Annex A.

Response:

- a) No analysis of this kind was completed for the Heat Pump offering. Any residential customer satisfying the requirement for eligible homes can apply for this incentive, including on-reserve and off-reserve First Nation residents.

Eligibility requirements can be found on Exhibit E, Tab 3, Schedule 1, page 9. In addition, homes must have a gas boiler with air handler or gas furnace with a ducted air distribution system.

- b) Enbridge Gas understands the challenges associated with providing Residential offerings to on-reserve customers and, as part of program set up, will consider specific support to the HVAC contracting community to reach on-reserve customers.

For example, for the delivery of the on-reserve Home Winterproofing Program, Enbridge Gas considered the specific support and outreach required, which resulted in the employment of an Indigenous Delivery Agent for On-Reserve Homes and a Community Project Lead to assist in overcoming challenges.

- c) Please see response to part b above.
- d) The Residential Low Carbon offer will monitor its progress with respect to addressing market barriers related to awareness, accessibility and affordability. Enbridge Gas will make reasonable efforts to maximize the reach of this offering to eligible customers, which would include eligible Indigenous customers, through the development of its contractor network. Please see Exhibit E, Tab 3, Schedule 1, page 5 “Metrics” for the initial metrics that will be monitored at the launch of the program.
- e) Confirmed. Please see response to Exhibit I.2.EGI.PP12a-c.

ENBRIDGE GAS INC.

Answer to Interrogatory from  
Building Owners and Managers Association (BOMA)

Interrogatory

**Issue 12**

Reference:

EB-2021-0002, Exhibit C, Schedule 1, Page 1, Section 8

Question(s):

To what extent does the Evaluation Contractor (EC) include at the meter savings verification as part of the evaluation and audit process? Please comment on Adjustment Factors and Verification Adjustments in this regard.

Approximately what proportion of the verified gas savings achieved in the 2015-2020 period were validated by measurements at the meter of participating buildings?

Response

Natural gas savings verification adjustments applied by the EC as part of the audit process are in the table below. The table refers only to gas savings verification and does not include verification adjustments related to installation rates, desk review of prescriptive measures or NTG adjustments.

<b>Natural gas savings verification adjustments</b>	<b>How did the EC develop this verification adjustment?</b>
Low-Income Home Weatherization and Indigenous Whole Home savings verification adjustments	Review and/or rerun of HOT2000 energy modeling
Residential Home Efficiency Rebate savings verification adjustments	Review and/or rerun of HOT2000 energy modeling
Energy Leaders savings verification adjustments	Engineering Estimates
Custom Project Savings Verification (“CPSV”) verification adjustments for Custom CI and Large Volume program offerings	Engineering estimates, modeling, pre/post production data, and pre/post measurements at the submeter or meter of participating buildings <sup>1</sup>
RunItRight, RunSmart, and Strategic Energy Management (“SEM”) offering savings verification adjustments	Pre/post measurements at the meter of participating buildings

1- As part of the Evaluation Contractor’s CPSV work, the EC can select a verification method that it determines to be appropriate for the specific project and baseline. The EC’s latest CPSV findings conclude that “both utilities chose to retain engineers with a strong understanding of their customers’ building and process systems and showed a commitment to finding accurate savings estimates.”<sup>1</sup> The EC often retains the savings methods used by Enbridge Gas as being appropriate.

In the joint 2017/2018 audit, the EC directly verified approximately 10% of Enbridge Gas’s portfolio net cumulative gas savings. Within these verified savings, approximately 32% were validated using measurements at the submeter or meter of participating buildings. This amounts to approximately 4% of all 2017/2018 portfolio net cumulative gas savings.

Enbridge uses measurements at the submeter or meter of participating buildings for custom project savings claims that were not directly verified by the EC. An estimated 11% of Enbridge Gas’s 2017/2018 portfolio net cumulative gas savings were claimed using measurements at the submeter or meter of participating buildings.<sup>2</sup>

Enbridge Gas notes that measurements at the meter of participating buildings are not always a suitable means of calculating natural gas savings. For many projects and

<sup>1</sup> OEB 2017-2018 Natural Gas Demand Side Management Custom Savings Verification (March 13, 2020), p. 23. <https://www.oeb.ca/sites/default/files/2017-2018-DSM-Custom-Savings-Verification.pdf>

<sup>2</sup> Due to COVID-19, CPSV studies were not completed in 2019 and 2020. CPSV study results from 2017/18 were applied to 2019 and 2020 program years. All percentages reported in response to this IR are assumed to be reasonable proxies to these years and to 2015 and 2016 as well.

measures across Enbridge Gas's DSM portfolio, savings are calculated using baselines that are more efficient than existing equipment. Savings for these projects are generally not compatible to measurements at the meter unless the meter-based savings are adjusted with engineering estimates. It is also common for project savings to be too small of a percentage of total meter consumption to be reliably measured.

ENBRIDGE GAS INC.

Answer to Interrogatory from  
Pollution Probe (PP)

Interrogatory

**Issue 12**

Question(s):

- a) Please describe the split in responsibility between Enbridge and the OEB Evaluation Advisory Committee (EAC) for development or assessment of input assumptions for programs and measures.

Response:

Input assumptions (discussed at Exhibit C, Tab1, Schedule 1, pages 31 to 32) include:

- Natural gas savings
- Electricity impacts
- Water impacts
- Estimated useful life
- Equipment cost

Input assumptions for applicable DSM measures are defined relative to a frame of reference (“base case” or “baseline”).

Enbridge Gas is accountable for developing pre-audited program results based on the input assumptions and base cases it considers most appropriate. In general, the sources for input assumptions includes the Technical Resource Manual<sup>1</sup> for prescriptive measures, and customer-specific information, engineering methods, and EUL values/guidelines<sup>2</sup> for custom measures. Further details regarding DSM inputs are provided at Exhibit E, Tab 5, Schedule 1.

The OEB is accountable for coordinating the auditing of Enbridge Gas’s annual DSM results (including the use of input assumptions) as well as for coordinating updates to

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<sup>1</sup> Ontario Energy Board website – Natural Gas Demand Side Management (DSM) (launch: November 11, 2005), Technical Resource Manual (including Historical Measures and Assumptions Updates) <https://www.oeb.ca/industry/policy-initiatives-and-consultations/natural-gas-demand-side-management-dsm>

<sup>2</sup> EB-2021-0003 EGI DSM Multi-year Plan and Framework (May 3, 2021), Exhibit E, Tab 5, Schedule 1, Attachments 1 and 2.

the Technical Resource Manual.<sup>3</sup> During the annual evaluation process, EAC members can provide input and advice to the EC on the appropriateness of these input assumptions or the development and assessment of new assumptions. This is done through activities such as the Technical Resource Manual review process, Custom Project Savings Verification (“CPSV”) studies, or studies like the Custom Measure Life Review.<sup>4</sup>

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<sup>3</sup> EB-2021-0003 EGI DSM Multi-year Plan and Framework (Updated: September 29, 2021), Exhibit C, Tab 1, Schedule 1, p. 29.

<sup>4</sup> OEB Final Report: Custom Measure Life Review (May 10, 2018).  
<https://www.oeb.ca/sites/default/files/OEB-DSM-Custom-Measure-Life-Review.pdf>

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**Issue 12**

Question(s):

Please provide any recommendations that Enbridge has to improve the Evaluation, Measurement, & Verification (EM&V) process and/or Evaluation Advisory Committee (EAC).

Response:

Enbridge Gas has provided its recommendations regarding EM&V and the EAC at the following references:

- Exhibit C, Tab 1, Schedule 1, pages 30 to 31 (Section 8.7).
  - This includes the submission of an Evaluation Governance Terms of Reference.
- Exhibit E, Tab 4, Schedule 5, pages 1 to 7 (Evaluation protocols, modernization of NTG evaluation).
  - This includes a request that the OEB direct OEB Staff to coordinate the development of Ontario DSM evaluation protocols, and a request to explore the modernization of net-to-gross evaluation methodologies in Ontario.

Furthermore, Enbridge Gas has provided approaches to the evaluation components of the DSM Framework at Exhibit C, Tab 1, Schedule 1, pages 25 to 38 (Section 8 – Program Evaluation, and Section 9 – Input Assumptions & Adjustment Factors).