EB-2025-0295

Enbridge Gas – 2027-2030 Demand Side Management

Interrogatories of Environmental Defence, the Green Energy Coalition, and Pollution Probe

Interrogatory #A-ED/GEC-1

Reference: Exhibit D

Question(s):

(a) To help assess the value of DSM, please provide: (i) the lifetime gas savings from DSM programs since 1993, (ii) the approximate value of all gas savings from DSM program since 1993, and (iii) the net benefits of all DSM programs since 1993. For all items, please include the lifetime savings of all programs, including those projected to accrue in the future from past programs, not only the first-year savings. For (iii), please include the full measure costs, the lifetime avoided costs, and all other relevant costs and benefits. We understand that cost-effectiveness tests and practices have changed over time and that Enbridge will need to include caveats and notes. We do not object to Enbridge using simplifying assumptions but ask that the potential impact of those assumptions on the figures be stated. Please include the underlying calculations, including breakdown of the lifetime savings by program year.

Please provide both the total figure for each item and the amounts for each year.

Interrogatory #B-PP-2

Enbridge notes that the IEP was a major influence on Enbridge's development of the 2027-2030 DSM Plan.

a) Please provide all materials (e.g. notes, summaries, presentations, etc.) developed (internally or externally) and used by Enbridge to assess the IEP.

b) Please provide the four principles noted in the IEP and indicate how each of these were used (or not used) to inform the DSM Plan.

Interrogatory #B-PP-3

Please explain the process, reviews and approvals used to include the 2027 budget of $191 million in the DSM Plan and related application. Please provide a copy of the materials (e.g. emails, presentations, notes, etc.) used for senior management and Board of Director reviews and/or approvals related.

Interrogatory #B-PP-4

Did Enbridge undertake a review of DSM program and portfolio efficiencies that could improve the DSM results per dollar of ratepayer funding spent? If yes, please provide a copy of all analysis, results and communication materials related to this analysis. If no, please explain why not.

Interrogatory #B-PP-5

Reference: Enbridge Gas's proposed 2027-2030 DSM Plan is projected to achieve meaningful natural gas savings of approximately 0.5% of sales in 2027 and increasing to approximately 0.6% of sales by 2030.

Please explain what internal reviews and approvals were undertaken to set the DSM Plan targeted savings levels below those ordered by the OEB (i.e. 0.8% of sales in 2027 and 1.0% of sales in each year from 2028 through to the end of 2030). Please provide a copy of the materials (e.g. emails, presentations, notes, etc.) used for reviews and/or approvals.

Interrogatory #B-PP-6

Reference: If any OEB-approved 2026 DSM programs are not ultimately approved for 2027, sufficient lead time is required to notify customers and industry partners of program closures. [Page 4]

a) Please provide a copy of any notices (including preliminary notices and email notifications, etc.) provided to industry partners or program delivery agents to notify them their program will (or may) not continue during the 2027-2030 plan term.

b) For each DSM programs and service (e.g. workshops, trainings, etc.) that Enbridge intends to decrease or cease for the new DSM Plan term, please provide the basis and related analysis used by Enbridge to make that decision.

c) Please provide any notification to customers on program (including eligibility or incentive) changes implemented of proposed since the OEB's 2026 DSM Decision which simply extended the current approach from 2025.

Interrogatory #B-PP-7

Reference: "The OEB expects that Enbridge Gas's next multi-year natural gas conservation plan will result in meaningful natural gas savings each year between 2026 and 2030. This builds on the End-of-Term Natural Gas Reduction Incentive that is approved for the 2023-2025 term and payable should Enbridge Gas lower overall sales volumes at the end of 2025 relative to 2022 on a weather normalized basis. The OEB expects that, at a minimum, the level of natural gas savings from DSM programs during the next multi-year term will be the equivalent of at least 0.6% of sales in 2026, 0.8% of sales in 2027 and 1.0% of sales in each year from 2028 through to the end of 2030, relative to the prior year on a weather normalized basis. This will ensure that significant benefits are provided to Enbridge Gas's customers." [EB-2021-0002, page 4]

Please provide a table for the years 2027 through 2030 indicating:

- Forecasted annual throughput
- The annual DSM volume reduction based on 0.6% of sales in 2026, 0.8% of sales in 2027 and 1.0% of sales in each year from 2028 through to the end of 2030.
- The proposed DSM Plan annual sales volume reduction in each year from 2027 to 2030 and the related percentage of sales volumes.
- The cumulative sales volumes decrease based on 0.6% of sales in 2026, 0.8% of sales in 2027 and 1.0% of sales in each year from 2028 through to the end of 2030.
- The cumulative sales volumes decrease for 2027 through 2030 based on the proposed DSM Plan.

Interrogatory #B-PP-8

References:
Enbridge Gas engaged with stakeholders, through meetings with intervenors who participated in the previous multi-year DSM Plan proceeding as well as through a residential customer survey, to obtain input regarding DSM budget levels. The feedback received was mixed, reflecting a range of opinions and considerations among stakeholders and customers. [B/1/1, page 4]

In anticipation of proposing the 2026-2030 multi-year DSM Plan (which later became the 2027-2030 DSM Plan) … [C/1/5, page 3]

a) Please provide a list of the differences between the previous 2026-2030 DSM Plan developed and filed in 2024 to the 2027-2030 DSM Plan filed in this application.

b) Was any consultation conducted on this 2027-2030 DSM Plan or just the previous plan filed in EB-2024-0198? If no, why not. If yes, please provide the details and changes to the DSM Plan based on the feedback.

c) From the new additions in the 2027-2030 DSM Plan included in the response to part a, please explain if any of these were specifically made due to recent policy changes (e.g. the IEP).

Interrogatory #B-PP-9

Reference: Enbridge Gas was concerned that filing a 2027-2030 DSM Plan that proposed to achieve the OEB's expected targets would require such a substantial budget that it would result in rate impacts that would be unacceptably high and would therefore not be approved, resulting in an extended and inefficient regulatory process. [B/1/1, page 4]

a) Please provide the DSM Program details (savings and cost by program and expenditure type) for the DSM Plan version that met the OEB's expected target levels as outlined in the EB-2021-0002 Decision and Order.

b) Did Enbridge only do a preliminary estimation of budgets required to meet the OEB's expected targets or was a more detailed level analysis (similar to the DSM Plan filed by Enbridge) conducted? If no, please explain why not. If yes, please provide a copy of those materials.

c) What criteria and analysis did Enbridge use to determine that rate impacts would be unacceptably high? Please provide a copy of the details, analysis and documentation of the process and internal decision.

d) Please provide all materials and analysis that Enbridge has to support that using the OEB's expected targets as outlined in the EB-2021-0002 Decision and Order would result in an extended and inefficient regulatory process.

Interrogatory #B-PP-10

Reference: Enbridge Gas is proud of its energy efficiency efforts to date and is pleased with recent communications from the Ontario government in both the Made in Ontario Environment Plan and the November 27, 2020 joint letter from the Ministry of Energy and the Ministry of Environment, Conservation and Parks, to the OEB confirming the government's continuing support for gas utility delivered natural gas conservation programs, acknowledging their important role in helping to achieve provincial greenhouse gas emissions.

a) Please provide a copy of the two recent documents noted above and state their relevance to this proceeding, compared to more recent policy documents released.

b) Please confirm that the Made in Ontario Environment Plan remains the most recent policy document related to the environmental issues it contains. If not, please provide the most recent policy document that replaces this.

c) Please confirm that DSM remains a current Provincial priority.

Interrogatory #B-PP-11

References: Enbridge notes that it has applied wording from the DSM Letter and DSM Framework [B/1/1, pages 2-7]

a) Please confirm that the DSM Letter and Framework Enbridge referred to were issues by the OEB December 2020. If not correct, please provide the accurate date reference.

b) Please explain why Enbridge has given more weight to the DSM Letter and Framework compared to more recent OEB direction, specifically EB-2021-0002 (Decision and Order issued November 2022) and EB-2024-0198 (Decision and Order issued November 2025).

Interrogatory #B-PP-12

Reference: Table 1 Total Budgets and Net Annual Natural Gas Savings Target (at 100% Target) as a Percentage of Forecasted Natural Gas Sales. [B/1/1, page 6]

a) Please provide a version of Table 1 noted above, adding the following information. Also, please provide a version in Excel, if possible.
    - Columns for the years 2023 through 2026 (noting which years are actuals and which are forecast values)

- Add “Net Annual Gas Savings (m3) per $ Budget” below the total budget lines (noted in Table 1 as lines 4 and 8)
- Add “Total Program Incentives” above the total budget lines (noted in Table 1 as lines 4 and 8). Total Program Incentives is defined as the amount of the budget which is paid out (i.e. excluding overhead, FTE, admin, and other non-incentive costs).

b) The footnote to Table 1 indicates “The denominator is the adjusted forecast natural gas sales volume for that year. Adjusted volumes exclude volumes from natural gas-fired generators, wholesale customers, rate classes ineligible for DSM and Enbridge Gas’s own fuel use. Refer to Exhibit D, Tab 2, Schedule 1.” Please provide a table showing the total sales volumes per year including all those values and a reconciliation of the volumes removed per year (by adjustment type) to arrive at the net sales volume amounts shown in Table 1.

Interrogatory #B-PP-13

Reference: Enbridge Gas has ensured programs are focused on achieving meaningful natural gas savings for customers while appropriately balancing rate impacts, and with a strong commitment to the OEB’s Guiding Principles set out in the DSM Framework. [B/1/1, page 6]

The TRC Plus Ration results for the portfolio range from 1.67 to 1.89 over the 2027-2030 DSM Plan term.

Please provide the total net benefits in dollar terms per year based on the DSM Plan and TRC Plus Ratio.

Interrogatory #C-PP-14

Reference: As part of the proposed changes to the DSM Framework, Enbridge is proposing to modify Framework wording to include: “Enbridge Gas should propose in its DSM Plans an appropriate minimum threshold for the weighted average measure life (“WAML”) across its portfolio of programs, excluding the Large Volume Program.” [C/1/1, page 3].

a) What basis and best practice references does Enbridge propose for determining an appropriate WAML?

b) What is the minimum WAML threshold which Enbridge would propose to use starting in 2027?

c) Please provide the WAML annual results from the current DSM Plan (2023-2026).

d) How will this influence the DSM Plan and delivery of DSM Programs?

e) What is the (financial or other) impact to Enbridge if it fails to meet the WAML threshold?

f) Why is large volume excluded from the calculation?

g) Why should the Framework be modified to leave future decisions on the WAML threshold to Enbridge rather than using a more traditional OEB approach (e.g. setting a target value through this OEB Decision or other more structured approach)?

Interrogatory #C-PP-15

Reference: Enbridge notes that the OEB Decision found that "…it would not be appropriate for the TAM to be proposed for use as part of the next multi-year DSM plan" [EB-2021-0002, OEB Decision and Order, November 15, 2022, p.72]. Enbridge has suggested that the OEB replace the current DSM Framework *Section 5.2 Target Adjustment Mechanism* wording with Section 5.2 Fixed Targets - *Enbridge Gas should propose fixed targets as part of its plan application, which are subject to adjustments as outlined in Section 9.3 Input Assumptions and Adjustment Factors.* [C/1/1, page 5]

a) Please explain the impact if the OEB simply removed the *Section 5.2 Target Adjustment Mechanism* wording from the DSM Framework and relied on OEB approved targets set through each DSM proceeding.

b) Given that any OEB approved DSM targets for any plan come from an OEB Decision, please provide comments on the following potential language for Section 5.2 – *DSM Plan targets are to be set by the OEB on a fixed basis (i.e. no automatic target adjustment mechanism) through a decision based on input from all stakeholders including Enbridge Gas. As part of any DSM Plan filed, Enbridge shall include its recommended targets, including supporting justification and supporting materials.*

Interrogatory #C-PP-16

Reference:
Enbridge proposes that the second paragraph of Section 6 of the DSM Framework be changed to: *The shareholder incentive amount available each year at 100% should be 5% of Enbridge Gas's total DSM annual budget*.

a) Please provide a table including the following information from 2023 to 2030.
    - Year
    - SSM at 100% (OEB approved for years 2023 to 2026 and Enbridge proposed for 2027-2030)
    - DSM Budget
    - Percentage of DSM budget

b) Please provide a list of utilities who currently use a DSM incentive as a percent of budget and please provide the reference to the approval from the regulator.

c) Please explain why a shareholder incentive should be a percentage of DSM budget when the DSM funds are paid by ratepayers rather than Enbridge shareholders.

d) Please provide the current details on to-date performance and estimated incentive related to the additional $30 million, incremental to the maximum shareholder incentive related to

performance scorecards, available for the 2023-2025 term. If this incentive estimate is low, please explain why.

Interrogatory #C-PP-17

Reference: Enbridge proposes that the language under "Attribution of Benefits Between Enbridge Gas and Other Parties" within "Section 7.3 Attribution" of the DSM Framework should be replaced with the following: *To avoid a disincentive to collaborate with other parties, 100% of savings from a DSM program that involves Enbridge Gas and other parties should be attributed to the relevant Enbridge Gas DSM program, for the purpose of scorecard results.*

a) Please explain how double counting of results would be avoided if the OEB were to replace the existing language with Enbridge's proposed wording (particularly if an attribution agreement differed from this).

b) Does Enbridge currently have any program attribution agreements that do not enable it to claim the gas savings for DSM purposes? If yes, please provide a copy.

c) Please explain how the OEB could impose DSM savings attribution terms for a contract with a party that is not regulated by the OEB?

Interrogatory #C-PP-18

Please provide a table of all program partnerships and include the following information.

- Program
- Program partner names
- Program Summary
- Customers classes included
- Attribution treatment
- Start / End Date
- Attribution and cost sharing agreement – provide details, if yes.

Interrogatory #C-PP-19

a) When was a copy of the draft 2027-2030 DSM Plan sent to the DSM Stakeholder Advisory Group (SAG) for review and comment prior to filing? If a draft copy was not provided, please explain why?

b) Please provide a copy of the 2027-2030 DSM plan communications to the DSM Stakeholder Advisory Group and a copy of all feedback received.

c) Please provide a summary of all the stakeholder consultation (other than SAG) conducted for the 2027-2030 DSM Plan and a copy of all feedback received.

Interrogatory #C-PP-20

Please provide a copy of all correspondence, presentations and other materials related to the DSM Plan with the Province of Ontario, including the Ministry of Energy and Mines (previously Ministry of Energy).

Interrogatory #C-PP-21

Reference: Additionally, it will also be important for Enbridge Gas to identify any customer segments and programs that lend themselves most favourably to integration with electricity CDM programs as well as those areas of the market that have the greatest potential for further fuel switching and seek input from the SAG. [C/1/4, page 3 and originally from EB-2021-0002 Dec_Order_EGI_DSM Plan_20221115, Schedule D]

Please provide a list of new program partnerships (by customer segment) and programs integrated with other delivery agents (e.g. LDC, IESO, municipalities, etc.) for the 2027 – 2030 DSM Plan.

Interrogatory #C-PP-22

Reference: Stakeholder engagement with municipalities was conducted primarily through a survey with Ontario municipalities to better understand municipal priorities associated with conservation programs. [C/1/5, page 23]

a) Please provide a copy of the municipal survey and related materials (including results reports, presentations, results analysis, etc.).

b) Please provide the sample size, list of municipalities included and response rate.

c) Were any new program options (including partnerships) presented or discussed with municipalities? If no, why not. If yes, please provide the details.

Interrogatory #C-PP-23

Reference: Enbridge Gas and the IESO continue to collaborate to support commercial, institutional, affordable housing multi-residential, industrial, greenhouse and agricultural customers through the following training initiatives: [C/1/6, pages 6-7]

i. Certified Sustainable Building Operator ("CSBO")
ii. Certified Energy Manager ("CEM")
iii. Dollars to $ense ("D2$") Workshops

a) Please provide the budget per year (Total, Enbridge and IESO) for each of these initiatives.

b) Are there any targets related to these initiatives. If yes, please provide the scorecards or equivalent target mechanisms.

c) Please explain what the role is for each partner for these initiatives.

Interrogatory #C-PP-24

Reference: Enbridge notes the value of municipalities and specifically notes one example for DSM as being "supporting municipal energy concierge services". [C/1/6, page 9].

a) Please provide a table of the municipality (or related third party providers through community organizations) where Enbridge provides DSM funding to supporting municipal energy concierge services. In the table, please provide the annual amount provided to each over the current DSM Plan 2023-2026.

b) Please provide a similar table as noted in part a for each year of the 2027-2030 DSM Plan.

c) Enbridge has also provided funding and incentives in the past to municipalities which drove DSM results. Using the Better Buildings Partnership with the City of Toronto as an example, please provide the level of funding and the level of results achieved through that arrangement.

Interrogatory #C-PP-25

References: [C/1/4, Table 1 and originally from EB-2021-0002 Dec_Order_EGI_DSM Plan_20221115, Schedule D]

The OEB expects that Enbridge Gas will seek input from the SAG to identify programs that should be expanded as part of the next DSM plan. It is expected that Enbridge Gas will also consider the program recommendations that were advanced by experts in this proceeding.

The OEB expects that the additional program opportunities identified by parties in this proceeding, including retro-commissioning, an Energy Manager Subsidy program and Municipal Support and Incentive programs should be explored by Enbridge Gas with input from the SAG. It is the OEB's expectation that Enbridge Gas's next DSM plan application will address the nature of these discussions and include any program opportunities that will result in material benefits.

a) Please provide the documentation and results related to seeking expanded DSM programs from stakeholders, including the SAG.

b) Please provide the list and evidence references for all new and enhanced programs added to the 2027-2030 DSM Plan.

c) For any programs removed from the current DSM Plan (2023-2026), please provide documentation on how those proposed changes were shared with stakeholders (including the SAG) and provide all stakeholder feedback received.

Interrogatory #C-ED/GEC-26

Reference: Exhibit C, Tab 1, Schedule 1 (DSM Framework)

Question(s):

(a) To help us understand the proposed changes to the DSM framework, please develop and provide tracked changes versions of the DSM framework comparing the following versions:
    (i) The current version versus the proposed version;
    (ii) The version proposed in EB-2024-0198 and the version proposed in this application;
    (iii) The version proposed by Enbridge in EB-2021-0002 and the one approved by the board in EB-2021-0002; and
    (iv) The previous version and the one approved by the Board in EB-2021-0002.

Interrogatory #C-ED/GEC-27

Reference: Exhibit C, Tab 1, Schedule 1, Page 2-3 (DSM Framework)

Question(s):

(a) Please describe how Enbridge calculates its weighted average measure life ("WAML") and provide the formula.
(b) Please provide a table with the following data for the past 10 years and forecast over 2027-2030:
    (i) The lifetime TRC+ net savings ($) of DSM programs implemented each year (actual or forecasted); and
    (ii) The lifetime gas savings (m3) of DSM programs implemented in each year (actual or forecasted).

    Please provide best estimates even if Enbridge has not calculated lifetime savings for the purpose of developing its application.
(c) Regarding the statement that "the minimal WAML threshold will be subject to adjustments to account for changes in measure life assumptions outside of the utilities control…":
    (i) What does "subject to adjustments" mean? Is Enbridge suggesting that the minimum WAML would change formulaically? If so, how would that change be calculated?
    (ii) Could any potential changes to minimum WAML be either decreases or increases? If not, why not?
    (iii) Please explain why Enbridge should not be expected to modify its program portfolio if there is a change to TRM measure life assumptions, especially the forecast average measure life for the Company's programs is greater than the minimum.

Interrogatory #C-ED/GEC-28

Reference: Exhibit C, Tab 1, Schedule 1, Page 6 (DSM Framework)

Question(s):

(a) What is Enbridge's rationale for replacing the current framework requirement for an end-of-term incentive with an obligation to just consider such an incentive?

Interrogatory #C-ED/GEC-29

Reference: Exhibit C, Tab 1, Schedule 1, Page 6 & 7 (DSM Framework)

Question(s):

(a) Please provide other options to address attribution of savings in jointly delivered programs that will avoid disincentivizing joint programming without attributing 100% of the benefits to the Enbridge DSM program. (see also Ex. C-1-6)
(b) Would there be any threshold requirement, in terms of level of collaboration (including, but not limited to financial contributions) for Enbridge to receive 100% attribution under its proposed framework change? What would such requirements be?
(c) Please discuss an alternative change to the reporting requirements that would require the reporting of data over the past two DSM terms. Please list which of the concerns discussed in paragraph 14 would be addressed.

Interrogatory #C-ED/GEC-30

Reference: Exhibit C, Tab 1, Schedule 1, Page 12-13 (DSM Framework)

Question(s):

(a) Please explain how Enbridge envisions that prospective changes to targets would be calculated for each of the different factors that might precipitate such a change.
(b) Please provide all known examples of other jurisdictions that allow for prospective changes in savings targets for each of the factors proposed by Enbridge to trigger such target changes.
(c) Please explain why changes to *any* TRM assumption should result in a prospective change to targets. Why shouldn't Enbridge instead be expected to modify its portfolio to shift resources from a measure for which deemed savings are reduced to other measures?
(d) What does Enbridge mean by "changes to input assumptions or adjustment factors required to remain in alignment with third parties…"? Please provide an example.

Interrogatory #C-ED/GEC-31

Reference: Exhibit C, Tab 1, Schedule 3, Page 3 (DSM Achievable Potential Study)

Question(s):

(a) Please provide a list of the limitations and challenges with the 2024 APS as identified by the SAG.

(b) Please provide a list of any other limitations and challenges with the 2024 APS that Enbridge has identified.

Interrogatory #C-ED/GEC-32

Reference: Exhibit C, Tab 1, Schedule 3, Page 3 (DSM Achievable Potential Study)

Question(s):

(a) Please provide detailed responses to the recommendations found at pages 25 to 29 of the 2024 achievable potential study. For each, please explicitly state (a) whether Enbridge agrees or disagrees with the recommendation, and (b) what concrete steps, if any, Enbridge will take to implement the recommendation. For ease of reference, please include the full text of each of the APS recommendations in the response (e.g. in a table with the recommendations in column A and the responses in column B).
(b) Please provide detailed responses to all other recommendations found in the 2024 achievable potential study. For each, please explicitly state (a) whether Enbridge agrees or disagrees with the recommendation, and (b) what concrete steps, if any, Enbridge will take to implement the recommendation. For ease of reference, please include the full text of each of the APS recommendations in the response (e.g. in a table with the recommendations in column A and the responses in column B).
(c) Please provide a copy of all DSM feedback from Chris Neme that is not listed in the SAG report or elsewhere in Enbridge's application (e.g. in emails with suggestions or recommendation to Enbridge).

Interrogatory #C-ED/GEC-33

Reference: Exhibit C, Tab 1, Schedule 4 (DSM SAG)

Question(s):

(a) Page 10 states: "Enbridge Gas has made adjustments to its proposed DSM programs based on SAG feedback, for example …" Please provide a full list of all of the SAG feedback that Enbridge did not fully accept.

Interrogatory #C-ED/GEC-34

Reference: Exhibit C, Tab 1, Schedule 4, Attachment 1 (DSM SAG)

Question(s):

(a) Please provide Enbridge's position on each of the following SAG recommendations, specifically stating whether the recommendation has been implemented (and if yes, how):
    (i) "Thus, while such an incentive included as part of a future DSM plan would provide helpful direction to Enbridge, <u>it might be even more effective if adopted</u>

as a broader incentive across all Enbridge activities such as through a rates case." (p. 22)

(ii) "Non-utility members noted that the types of measures to include in a DSM program should consider the long-term implications and avoid locking consumers into using fossil fuels for many years to come, where other practical, cost-effective options exist." (p. 22)

(iii) "Instead, the group suggested that it may be more practical (and less time intensive and costly) to develop an updated NEB-adder value that is more general in nature, informed by values used in other jurisdictions and expert opinion from the SAG (and possibly the EAC)." (p. 32)

(iv) "It was suggested that the OEB consider updating this value to 1-2% real to be consistent with current industry norms tying societal discount rates to risk free investment such as Canadian Treasury Bonds." (p. 34)

(v) "Non-utility members agreed that OEB staff should lead a collaborative study, similar to the approach used by the New England states, and hire an independent consultant team that develops avoided cost estimates through an engaged stakeholder process in a transparent manner." (p. 35)

Interrogatory #C-ED/GEC-35

Reference: Exhibit C, Tab 1, Schedule 4, Attachment 1 (DSM SAG)

Question(s):

(a) Please provide Enbridge's position on the following SAG recommendations, specifically stating whether the recommendation has been implemented (and if yes, how):

(i) "Non-utility members recommended that the cost of carbon value included in both avoided costs (for Achievable Potential Study analysis and cost-effectiveness analysis) should be updated to reflect a value that better represented the true cost of avoiding greenhouse gas emissions." (p. 33)

(ii) "Suggestions included that the cost of carbon be based on a proxy for the alternative to electrification, such as renewable natural gas or the marginal cost of GHG reduction outside of the natural gas sector." (p. 33)

(iii) "Non-utility members agreed that at a minimum, the social cost of carbon be considered by the OEB as the baseline carbon value applied for DSM going forward." (p. 33)

Interrogatory #C-ED/GEC-36

Reference: Exhibit C, Tab 1, Schedule 4, Attachment 1 (DSM SAG)

Question(s):

(a) Please provide Enbridge's position on the following SAG recommendations, specifically stating whether the recommendation has been implemented (and if yes, how):

(i) "Non-utility members also recommended that, in addition to the proposed level of natural gas savings and program budgets Enbridge includes in its application, Enbridge should also prepare information and analysis on isolated scenario(s) of program variability to be responsive to the OEB's direction for various levels of reductions in natural gas volumes throughout the 2026 to 2030 term, including a 1.0% reduction in annual gas sales by 2028. The group agreed that this should be done on a net natural gas savings basis and, at a minimum, be done at the sector level." (p. 37)

(ii) "Non-utility members suggested that Enbridge consider providing the OEB with an approximation of the cost and high-level insights, supported by some analysis, on the approach it would have to take to achieve the 1.0% natural gas reduction target. This will enable the OEB and other stakeholders to determine the reasonableness of Enbridge's proposal." (p. 37)

Interrogatory #C-ED/GEC-37

Reference: Exhibit C, Tab 1, Schedule 4, Attachment 1 (DSM SAG)

Question(s):

(a) Please provide a side-by-side table comparing the draft DSM plan details provided to the SAG for consideration prior to the drafting of the SAG report and the DSM plan currently before the OEB. Please include, for example, savings targets, budgets, and measure incentive levels for all programs.

Interrogatory #C-ED/GEC-38

Reference: Exhibit C, Tab 1, Schedule 6 (Coordination)

Question(s):

(a) On page 5 of its 2026-2030 application, Enbridge states: "It is important to note that collaboration is not without challenges. For example, Enbridge Gas and the IESO have different procurement requirements, which can require significant time and effort to align." Please elaborate and discuss potential future solutions.

Interrogatory #C-ED/GEC-39

Reference: Exhibit C, Tab 1, Schedule 6 (Coordination)

Question(s):

(a) Please provide a list of all third parties that provide services to Enbridge in relation to the planning and design of DSM programs (e.g. consulting services). Please provide a brief description of the services provided by each.

(b) Please provide a list of all third parties that provide services to Enbridge in relation to the delivery of DSM programs (e.g. consulting services). Please provide a brief description of the services provided by each.

Interrogatory #C-ED/GEC-40

Reference: Exhibit C, Tab 1, Schedule 6 (Coordination)

Question(s):

(a) Does the OEB have the jurisdiction to direct Enbridge to contract with a third party to develop a proposed design for the next DSM plan and programs? Please explain why or why not. Please include any relevant references to legislation or regulatory documents.
(b) Does the OEB have the jurisdiction to direct Enbridge to contract with a third party to deliver the next DSM plan and programs? Please explain why or why not. Please include any relevant references to legislation or regulatory documents.

Interrogatory #C-ED/GEC-41

Reference: Exhibit C, Tab 1, Schedule 6 (Coordination)

Question(s):

(a) Please provide a list of roles and responsibilities delineated between the IESO and Enbridge for the Home Renovation Savings.
(b) How were the program offerings determined for this program?
(c) What next steps does Enbridge anticipate for further progress for integration of this program?

Interrogatory #C-ED/GEC-42

Reference: Exhibit C, Tab 1, Schedule 6 (Coordination)

Question(s):

(a) Please list all the differences in measure availability and incentives levels in the residential one-window program as between gas-heated customers (funded by Enbridge) and other customers (funded by the IESO). Please explain and justify the differences.
(b) In preparing the residential one-window program, did the Ontario Government indicate that it wished all customers (incl. gas-heated customers) to have access to heat pump incentives for the sake of consistency (or other reasons)? Please provide any communications from government officials on this point (and summarize any verbal discussions).
(c) Please provide the parameters, instructions, directions or other similar such materials provided to Enbridge by government officials and/or the IESO on the measures and incentive levels to be included in the one-window program.

(d) Please provide copies of the current program marketing materials.

Interrogatory #D-PP-43

Reference: Enbridge Gas is adopting a pragmatic, forward-looking approach that prioritizes the cost-effective expenditure of ratepayer funds while carefully balancing costs and benefits. [D/1/1, page 5]

Please explain how Enbridge's set a specific limit for DSM Plan expenditures and why this approach was used rather than the net benefits (costs – benefits) approach.

Interrogatory #D-PP-44

Reference: Outreach will prioritize municipalities whose energy efficiency objectives align with DSM goals. An Outreach Toolbox, comprised of various activities and tools, will be utilized to promote Enbridge Gas's DSM programs and financially support campaigns and collaborative initiatives. [D/1/1, page 11]

a) Please provide the full list of DSM goals that will be used to assess alignment with municipal energy efficiency objectives.

b) Please provide a copy of the Outreach Toolbox.

c) Please provide a copy of all consultation material specifically on the Outreach Toolbox and all stakeholder input (including the list of municipalities) used to develop and finalize the Outreach Toolbox.

Interrogatory #D-PP-45

Reference: Enbridge Gas has included a set of programs and scorecards, including annual targets, metrics, and associated budgets, designed to achieve the various goals and objectives outlined by the OEB and the Company. [D/1/1, page 13]

Please provide all goals and objectives for the Company that are different than those already indicated by the OEB. If there are none, please confirm that it is only the OEB goals and objectives that are being used and that Enbridge is not proposing that any additional goals and objectives be considered.

Interrogatory #D-PP-46

Reference: The DSM portfolio is divided into three categories: [D/1/1, page 13]

a) *Resource acquisition programs* focused on the achievement of net annual natural gas savings (m3).
b) *Multi-year offerings and initiatives* where activities and participation span more than one year.
c) *A Large Volume Program*

a) Please explain why Market Transformation and Industry/Municipal Support are not focused categories in the current DSM Plan.

b) If Enbridge is agreeable to include a scorecard for both Market Transformation and Industry/Municipal Support, please provide the annual budgets, metrics and targets and SSM weighting proposed.

Interrogatory #D-PP-47

References:

Enbridge Gas is proposing to increase DSM staff levels from the 169 full-time equivalents ("FTE") approved for 2023 in the Company's 2023-2025 DSM Plan, to 186 FTEs for 2026. [EB-2024-0198 - D/4/1 Page 1]

Enbridge Gas is proposing to increase DSM staff levels from the 169 full-time equivalents ("FTE") approved for 2023 in the Company's 2023-2025 DSM Plan, to 172 FTEs for 2027. The 2027 proposed FTE level of 172 FTEs is expected to remain consistent throughout the 2027-2030 DSM Plan term. [D/4/1, page 1]

a) Please provide details on the 14 (186-172) FTE decrease from what was previously proposed for this plan period. If this is due to removing programs or functions, please identify which ones were removed.

b) Were there any FTE reductions for this plan term (compared to the 2023 figures) due to program partnerships and/or industry outsourcing. If no, why not. If yes, please provide details by program area.

c) Has Enbridge ever had an audit conducted to verify the proper allocation of FTEs to DSM. If yes, please provide a copy of those materials.

d) Please confirm that the Building Beyond Code Program was primarily outsourced to industry partners for delivery. If incorrect, please provide details.

e) For the 5 FTEs decrease due to closing the Building Beyond Code Program, please provide the breakdown of how many FTEs were allocated to each of the following program elements.

    i. Residential Savings by Design that focuses on limiting lost opportunities in new construction building and supports the building community in striving to design and build to a net zero energy ready standard.
    ii. Commercial Savings by Design that prepares the commercial building community for future code advancements through a combination of support initiatives to increase the number of buildings designed to achieve 25% above existing Ontario Building Code standards.
    iii. Affordable Housing Savings by Design that enables and supports affordable housing projects with better energy performance than required by the Ontario Building Code.

iv. Commercial Air Tightness Testing

Interrogatory #D-PP-48

Reference: Climate policy is changing, and there is a lack of clarity around the resources, technologies, and support mechanisms needed to achieve policy requirements. In addition, customers are proceeding with conservation plans and projects at different paces as policy evolves. Enbridge Gas needs to engage proactively with market actors to explore and implement solutions that align with DSM objectives. [D/4/1, page 5]

a) Please provide details on all the climate related policy requirements Enbridge is currently aware of that pertain to DSM.

b) Please confirm that DSM results can reduce energy and emissions, as highlighted in Enbridge DSM annual reports and other related marketing materials.

c) Does Enbridge have staff and/or departments outside of DSM that are responsible for climate policy issues? If yes, please provide the department names, FTEs and details on how this differs from the work planned by DSM allocated FTEs.

Interrogatory #D-PP-49

Reference: Enbridge notes that FTEs have been reallocated to Partner Engagement: Expanded engagement with market actors, including trade allies and service providers [D/4/1, page 6]

a) Please provide the current list of partners, market actors, trade allies and service providers that Enbridge currently allocates FTEs to engages with.

b) Please provide the list of new and incremental partners, market actors, trade allies and service providers that Enbridge proposes to allocates FTEs to engages with.

c) For any partners, market actors, trade allies and service providers that Enbridge engages with for specific DSM programs, please explain why the engagement with the DSM program staff is not currently adequate.

Interrogatory #D-PP-50

Reference: The proposed system maintenance and improvements budget represents $1.6 million of the portfolio budget in 2027, allocated to sustain, enhance, and optimize Enbridge Gas's tracking and reporting systems for DSM activities. [D/5/1, page 1]

a) Does the $1.6 million represent the full budget over the period 2027 through 2030 for DSM system maintenance and improvements? If not, please provide a full list by system and cost type (e.g. maintenance and improvements) proposed over the plan term.

b) Please provide a summary of budget and actual by year and a total for all DSM system related costs for the current plan term (2023-2026).

c) Please confirm that the current DSM systems are able to be used to conduct scenario analysis, including cost-effectiveness analysis by input assumption. If not, please explain why that is no longer a feature of the DSM systems.

d) Please explain how the proposed DSM system changes will increase and support collaboration and coordination efforts with the IESO and other third parties as well as expanding the trade ally and service provider delivery channels.

Interrogatory #D-ED/GEC-51

Reference: Exhibit D, Tab 1, Schedule 1, Page 5 (Approach)

Preamble: Enbridge states on page 5 that its plan is intended to "enable broad participation."

Question(s):

(a) Please provide a table with Enbridge's best estimate of the number and percentage of customers that are eligible to participate in one or more Enbridge DSM programs by sector (e.g. residential, commercial, and industrial) and in total.
(b) Please provide a table with Enbridge's best estimate of the number and percentage of customers that are (a) eligible to participate in one or more Enbridge DSM programs, and (b) do not have other physical barriers to participate (e.g. lacking the equipment in question), by sector (e.g. residential, commercial, and industrial) and in total.

Assumptions and estimates will likely be needed in answering these questions. Please state any assumptions, estimates, and caveats. A best-efforts response is sufficient. Please label each table for ease of use by the parties and Board.

Interrogatory #D-ED/GEC-52

Reference: Exhibit D, Tab 1, Schedule 1, Page 5 (Approach)

Preamble: Enbridge states on page 5 that its plan is intended to "enable broad participation."

Question(s):

(a) Please provide a table with Enbridge's best estimate of the number and percentage of customers in each sector, and overall, that are unable to participate in DSM programs because of a lack of access to the up-front funds necessary to do so. Please discuss each of the ways in which Enbridge could help customers overcome these barriers, including steps Enbridge is taking now and ones that it would consider rolling out in the future. For those steps it would consider rolling out in the future, please indicate whether it would be willing to consider the step within this plan term or only as part of a future plan.
(b) Does Enbridge agree that helping to remove barriers such as the one described in (a) could help to improve participation rates and decrease free ridership? Please explain the response.

(c) Please provide a list of the barriers to customers being able to participate in Enbridge DSM programs. For each, please briefly describe the barrier and how impactful it is. Please order them from most to least impactful.

Interrogatory #D-ED/GEC-53

Reference: Exhibit D, Tab 1, Schedule 1, Page 5 (Approach)

Preamble: Enbridge states on page 5 that its plan is intended to "enable broad participation."

Question(s):

(a) Please provide a list of steps that can be taken to increase participation in DSM programs, with a description of each. Please include, if Enbridge believes they are relevant, expanding program options, increasing incentive levels, reducing paperwork, providing instant rebates (i.e. to reduce upfront capital needs), increased direct promotion to customers, and increased promotion through upstream incentives to suppliers.

Interrogatory #D-ED/GEC-54

Reference: Exhibit D, Tab 1, Schedule 1, Page 5 (Approach)

Preamble: Enbridge states on page 5 that its plan is intended to "enable broad participation."

Question(s):

(a) Approximately how many customers have participated in Enbridge DSM programs since the inception of those programs?
(b) Approximately how many of the 3.9 million homes and business currently served by Enbridge have had an efficiency upgrade through Enbridge's DSM programs since the inception of those programs? (This question focuses on the buildings/premises served by Enbridge as opposed to the customers who own them.)

Assumptions and estimates will likely be needed in answering these questions. Please state any assumptions, estimates, and caveats. A best-efforts response is sufficient. Please label each table for ease of use by the parties and Board.

Interrogatory #D-ED/GEC-55

Reference: Exhibit D, Tab 1, Schedule 1 (Approach)

Question(s):

(a) Enbridge previously proposed that it would conduct a mid-point assessment and that "the mid-point assessment would take the form of an application made by the Company to the

OEB in 2028, applicable to the 2029 and 2030 program years." Why is this no longer part of Enbridge's plan?

(b) This section refers to "flexibility" already afforded to Enbridge Gas by the DSM Framework. Please provide a full list of restrictions that Enbridge cannot address within the flexibility afforded to it.

(c) Please provide a list of types of measures and spending that Enbridge was directed *not* to pursue in the previous DSM decision. Is Enbridge seeking to have the flexibility to adopt those measures or spending within this DSM term? Does Enbridge believe that those same restrictions apply during this DSM term?

Interrogatory #D-ED/GEC-56

Reference: Exhibit D, Tab 2, Schedule 1 (Targets)

Question(s):

(a) Enbridge states that "volumes from: (i) customers classified as natural gas-fired generators, (ii) wholesale customers, (iii) rate classes ineligible for DSM, and (iv) Enbridge Gas's own operations, should be excluded from consideration." (p. 1) Please provide a table showing the annual demand (m3) from those customer types over the past 10 years and as a 10-year annual average. Please also include the total annual demand from all Enbridge customers in that year and the percentage of total demand consisting of the proposed excluded customers.

(b) Please provide a table showing for the past 5 years the annual and peak demand (m3) for (a) Enbridge general service customers, (b) contract customers, (c) ex-franchise customers, (d) other (if any), and (e) a total of the above.

(c) Enbridge proposes to exclude the demand from large volume customers who opt-out. Please provide a table showing for the past 5 years the annual and peak demand (m3) for (a) large-volume customers, (b) all other in-franchise customers, and (c) the large-volume customer demand as a percent of total demand.

(d) Approximately what percentage of large-volume customers does Enbridge expect to successfully opt out? What percentage of large-volume customers responded to the expression of interest noted in exhibit E-6-1, p. 10?

Interrogatory #D-ED/GEC-57

Reference: Exhibit D, Tab 2, Schedule 1 (Targets)

Question(s):

(a) Did Enbridge review and consider the results of Canadian Energy Efficiency Scorecard prepared by Efficiency Canada in preparing its DSM plan, including the targets levels? Please explain why or why not.

(b) Does Enbridge believe that the results of the latest Canadian Energy Efficiency Scorecard are reliable and credible?

(c) Please provide a table and bar chart comparing Enbridge's proposed savings levels as a percent of sales with other Canadian jurisdictions. Please order the jurisdictions from highest to lowest levels of savings as a percent of sales. Please use the most up-to-date information available.
(d) Please provide a table and bar chart comparing Enbridge's proposed savings levels as a percent of sales with nearby US jurisdictions (New York, Michigan, and the New England states). Please order the jurisdictions from highest to lowest levels of savings as a percent of sales. Please use the most up-to-date information available.
(e) Please provide one or more climate zone maps that cover both Canada and the US to better understand the comparability of US jurisdictions. Ontario will straddle more than one zone. Please estimate the percentage of Enbridge customers in each climate zone applicable to Ontario.

Interrogatory #D-ED/GEC-58

Reference: Exhibit D, Tab 2, Schedule 1, p. 6-10 (Targets)

Question(s):

(a) Please provide a breakdown of the 100% scorecard targets by offering and measure for targets that are expressed in cubic metres. Please provide this as an excel spreadsheet.
(b) Please provide all of the underlying assumptions (per unit gross savings, NTG ratio, number of participants, etc.), calculations and spreadsheets for the 100% target levels that are expressed in cubic metres. Please provide assumptions at the measure level wherever applicable.
(c) Regarding NZER homes and NZER Discovery homes, please provide an estimate of the size of the eligible market – i.e., the forecast annual number of new homes in Enbridge's service territory for 2026 through 2030 that could be built to these standards.
(d) For each scorecard metric please provide the actual results for comparable programs (and/or program bundles) in 2022, 2023 and 2024 as well as the actual spending on those programs. For example, for the residential net annual gas savings (m3) metric, please provide the actual m3 savings and spending on residential programs in 2022, 2023 and 2024. For all scorecard metrics, please provide such past actual performance (annual m3 savings in most cases) and spending broken down by offering as well as totals for all offerings covered by a given metric.
(e) To the extent that Enbridge believes it will be easier or more difficult to achieve savings in 2026 through 2030 in a sector than it was in 2022 through 2024, please provide specific reasons that may be the case.

Interrogatory #D-ED/GEC-59

Reference: Exhibit D, Tab 2, Schedule 1, p. 6-10 (Targets)

Question(s):

(a) Please provide a table comparing the proposed gas savings targets (100% target level) by sector in this application compared to the past 4 applications (including rollover applications).
(b) Please provide a table showing that actual gas saving for each year over the past ten years by sector and total. Please show the audited results for years where the audit has been completed and the unaudited results where no audited figure is available.

Interrogatory #D-ED/GEC-60

Reference: Exhibit D, Tab 2, Schedule 2 (Budget)

Question(s):

(a) Generally speaking, are the budget reductions due more to reduced incentives, reduced offerings, or reduced participation caused by variables that are exogenous to the DSM plan (e.g. end of the carbon price)?
(b) Please provide a table with the following information:
    (i) The budget reduction by sector;
    (ii) The percent of the budget reduction attributable to lower assumed participation rates exogenous to incentive levels and programming (e.g. from the elimination of the carbon price);
    (iii) The percent of the budget reduction attributable to reduced incentives or reduced programming for the sector; and
    (iv) A listing of the budget reduction amounts that can be directly and specifically calculated based on cut programing (e.g. elimination of a program or measure).
(c) How confident is Enbridge that it will not run out of money (including DSMVA) for any efficiency incentives throughout the life of the plan due to higher-than-expected participation? Please justify the answer.
(d) Which programs or measures are the most likely to run out of funding (including the DSMVA) over the life of the DSM plan? Why?
(e) Please provide all underlying figures and calculations in support of Enbridge's estimates of the reduced participation due to the elimination of the carbon price.
(f) Please provide a table for the past 5 years showing:
    (i) The overall participation levels and savings levels (as a % of throughput) for each of the past 10 years; and
    (ii) The carbon price ($/CO2e and $/m3).

Interrogatory #D-ED/GEC-61

Reference: Exhibit D, Tab 2, Schedule 2 (Budget)

Question(s):

(g) Please provide an interrogatory response that <u>fully</u> implements the following recommendation from page 37 of the SAG Report:

> Non-utility members also recommended that, in addition to the proposed level of natural gas savings and program budgets Enbridge includes in its application, Enbridge should also prepare information and analysis on isolated scenario(s) of program variability to be responsive to the OEB's direction for various levels of reductions in natural gas volumes throughout the 2026 to 2030 term, including a 1.0% reduction in annual gas sales by 2028. The group agreed that this should be done on a net natural gas savings basis and, at a minimum, be done at the sector level. …
>
> Non-utility members suggested that Enbridge consider providing the OEB with an approximation of the cost and high-level insights, supported by some analysis, on the approach it would have to take to achieve the 1.0% natural gas reduction target. This will enable the OEB and other stakeholders to determine the reasonableness of Enbridge's proposal.

If Enbridge declines to implement part of this recommendation, please explicitly identify which part it declines to implement and justify its decision to do so.

Interrogatory #D-ED/GEC-62

Reference: Exhibit D, Tab 2, Schedule 2 (Budget)

Question(s):

(a) Please reproduce a copy of Table 1 that also includes the values for the past two DSM plans (approved amounts) as a comparison. Please also provide a row showing the total budget in inflation-adjusted terms. Please provide this as an excel spreadsheet if it is unwieldy to present in a PDF.
(b) Please provide a table showing the totals columns from tables 2 to 6 and the percent change between each budget item for each year. Please provide this as an excel spreadsheet if it is unwieldy to present in a PDF.
(c) Does the ring fencing discussed on page 14 mean that no *more* can be added to the "Research, Development and Market Data" budget from other budget items or only that funds from the "Research, Development and Market Data" budget cannot be transferred elsewhere?

Interrogatory #D-ED/GEC-63

Reference: Exhibit D, Tab 2, Schedule 2 (Budget)

Question(s):

(a) Please provide another version of the Figure 1 on page 3 in Ex-D-2-2 expressed in $CAD/m3.
(b) Please provide a copy of the full benchmarking study referred to on page 2 of Schedule 2. Please also provide the instructions provided to the consultant, the contract, the

underlying data tables and calculations, and any other presentation provided by the contractor aside from the one in Appendix 1 (or the equivalent information if the study was completed internally).

Interrogatory #D-ED/GEC-64

Reference: Exhibit D, Tab 2, Schedule 2 (Budget)

Question(s):

(a) For each value in Table 6 (p. 16 of 16) that is directly copied from the APS, please provide the specific page where the APS value can be found.
(b) For each value in Table that is computed by Enbridge using some APS data or assumptions, please provide the page reference for the APS data and assumptions, as well as additional assumptions – and their sources – that Enbridge used in the computation.
(c) The gross budget values in Row 6, Table 7 appear to be about 1.67 times the APS incentives budget values in Row 4. Does that mean that Enbridge has assumed approximately a 60% net-to-gross (NTG) value? If so, what is the basis for that assumption? If not, please explain what NTG assumption(s) Enbridge assumed and how it computed the impact of applying such NTG assumption(s).

Interrogatory #D-ED/GEC-65

Reference: Exhibit D, Tab 2, Schedule 2 and Appendix 1 (Budget)

Question(s):

(a) Page 10 of the presentation states that "Enbridge reverts to upper half of GROSS savings ratios due to lower NTG ratios." Would Apex and/or Enbridge agree that Enbridge likely has lower NTG ratios because its incentives are comparatively lower, which results in free ridership.
(b) Does Enbridge agree that, all other things equal, higher incentive levels will generally reduce free ridership levels?
(c) The jurisdictional review provides various analysis of utility spending, but the cost-effectiveness in Ontario focuses on costs to all participants (i.e. the whole measure cost, including the customer contribution to the measure cost). Please provide a comparison of the portfolio-wide cost-effectiveness in the different jurisdictions based on the whole measure costs (i.e. based on something similar to the TRC test). Please express the comparative cost-effectiveness in two separate figures based on (i) the ratio of TRC benefits to costs and (ii) the ratio of gas savings to full TRC costs. Please develop the response on a best-efforts basis even if this information was not gathered for the DSM application. Although we have used the term TRC, we understand that different jurisdictions will have different tests and therefore assumptions, estimates, and caveats will be needed.

Interrogatory #D-ED/GEC-66

Reference: Exhibit D, Tab 2, Schedule 2 (Budget and Targets)

Question(s):

(a) Please provide the information and table requested in Exhibit I.6.EGI.ED.20 in EB-2021-0002 but for this application
(b) Please provide a copy of the table in Exhibit J1.4 in EB-2021-0002 extended out to 2030.
(c) Please provide the DSM budget and DSM net TRC savings for each of the past 10 years and for the 2027-2030. Please also provide the same figures adjusted for inflation and as a ratio of the revenue requirement.
(d) Please provide the DSM spending on administration/overhead over the past 10 years and for the 2027-2030. Please include both global administration/overhead and sector-specific administration/overhead, and the total of both.

Interrogatory #D-ED/GEC-67

Reference: Exhibit D, Tab 2

Question(s):

(a) Please provide a side-by-side table comparing the proposals in 2026-2030 DSM plan with the proposals in this 2027-2030 DSM plan including: gas savings targets (overall and by sector), budgets (overall and by sector), scorecard design, municipal engagement, research/innovation, and DSM plan inputs. Where they differ, please explain why.

Interrogatory #D-ED/GEC-68

Reference: Exhibit D, Tab 2, Schedule 3 (Shareholder Incentives)

Preamble: The SAG recommends that the 100% scorecard shareholder incentive levels be equal to 5% of the DSM budget. This will incent and reward Enbridge for proposing DSM plans with that will achieve additional cost savings for customers. These questions explore two variants:

(a) Setting the 100% scorecard shareholder incentive to equal $0.10 per first year cubic meters of gas savings proposed in the DSM plan (or, more broadly, pegging the overall shareholder incentives to the proposed savings in cubic meters)
(b) Setting the 100% scorecard shareholder incentive to equal $XX per forecast TRC+ net benefits forecast in the plan (or, more broadly, pegging the overall shareholder incentives to the proposed savings in cubic meters)

Question(s):

(a) If the proposed 2027 shareholder incentive at 100% achievement were to be converted into a ratio of shareholder incentive to first year gas savings, what would that amount be?

Please include your calculations. We calculate roughly $0.10 per first year cubic meters of gas savings.

(b) If the proposed 2027 shareholder incentive at 100% achievement were to be converted into a ratio of shareholder incentive to forecast TRC net benefits, what would that amount be? Please include your calculations.

(c) Please provide a table showing the resulting shareholder incentive at 100% performance for 2027 to 2030 based on (i) Enbridge's proposal, (ii) the alternative shown derived in (a), and (iii) the alternative derived in (b). Please include the calculations. To help us understand the calculations, please also include the portfolio-wide forecast gas savings (at 100% achievement) and portfolio-wide TRC+ net benefits (at 100% achievement). Please also provide the response in a live excel spreadsheet with formulas so that the parties can test different alternatives.

(d) Please list and discuss the pros and cons of Enbridge's proposal versus each of the variants discussed in the preamble.

(e) If the approved shareholder incentive envelope for the 2023 plan were to be converted into a ratio of shareholder incentive to first year gas savings, what would that amount be? Please include your calculations.

(f) If the approved shareholder incentive for the 2023 plan were to be converted into a ratio of shareholder incentive to forecast TRC net benefits, what would that amount be?

(g) Please provide a table showing, for each year of the past two DSM plans (as approved, if possible) and the proposed DSM plan, the portfolio-wide: (i) forecast gas savings (m3), (ii) forecast budget, (iii) TRC+ ratio, (iv) TRC+ ratio for only resource acquisition programs, (v) TRC+ costs, (vi) TRC+ benefits, (vii) TRC+ net benefits. Please provide all details as per the plans (as approved, if possible), not the actual results.

(h) Does Enbridge believe that the variants described in the preamble may be preferred by certain intervenors as they encourage plans with greater savings versus plans with greater spending?

(i) If one of the variants noted above were to be implemented, how does Enbridge believe it should be designed? For instance, how much incentive envelope would it recommend per cubic meter (for the first variant) and per forecast TRC+ net benefits (for the second variant)? Would Enbridge add to the scaling factor that would increase the envelope in a non-linear fashion to account for the increasing efforts needed to achieve greater benefits.

Interrogatory #D-ED/GEC-69

Reference: Exhibit D, Tab 2, Schedule 3 (Shareholder Incentives)

Question(s):

(a) Enbridge proposes that the shareholder incentive envelope be changed from a fixed figure that increases with inflation to one that is pegged to the overall budget levels. Please indicate how many and which of the leading jurisdictions have (i) fixed shareholder incentive envelopes or ones that increase by inflation versus (ii) incentive envelopes that vary based on effort and ambition (e.g. based on budget levels, gas savings, or net benefits).

(b) Is Enbridge's proposal to move away from an incentive envelope that is based on a fixed figure (subject to inflation) consistent with best practices in North America? Please discuss.
(c) Please discuss the benefits from moving away from a fixed envelope in terms of the incentives it creates around the development and design of DSM plans.

Interrogatory #D-ED/GEC-70

Reference: Exhibit D, Tab 2, Schedule 3, p. 14 (Shareholder Incentives)

Question(s):

(a) If the OEB does not accept the proposal by Enbridge Gas to eliminate the End-of-Term Natural Gas Reduction Incentive from the DSM Framework, and mandates the continuation of this incentive, how would Enbridge design it? Please indicate the proposed amount of the incentive, the reductions necessary to achieve that incentive, and any sectors that Enbridge would exclude from the calculations.
(b) Is Enbridge able to estimate an approximate relationship between Ontario's GDP growth (or decline) and weather-normalized gas demand (either overall, or just for the commercial and industrial sectors)? If not, are there other economic indicators that vary with gas demand in a relatively predicable manner? If yes, please express that approximate relationship in a formula. This question is relevant to the design of an end-of-term Natural Gas Reduction Incentive that includes an adjustment based on economic conditions.
(c) If the End-of-Term Natural Gas Reduction Incentive is continued, would Enbridge support a condition that would allow it to argue that certain demand increases that occurred should be excluded where they were due to industrial customers replacing coal with gas?
(d) Please provide a table with the annual demand from Enbridge customers (m3) over the past 10 years and forecast for the next 10 years. Please provide as granular a breakdown by customer as possible (residential, industrial, commercial, power generation, etc.). Please provide nominal and weather-normalized figures for all.

Interrogatory #D-ED/GEC-71

Reference: Exhibit D, Tab 3, Schedule 1 (Benefit-Cost Analysis)

Question(s):

(a) Please provide the data, calculations, and assumptions underlying the TRC-plus figures. Please provide this information in an Excel spreadsheet with all formulae intact and at the greatest level of granularity (e.g., measure-level inputs whenever available). At a minimum this should include:
    (i) Measure name
    (ii) Number of measures per year
    (iii) Per unit m3 savings per measure

(iv) Per unit kWh impacts per measure
(v) Per unit peak kW summer impacts per measure
(vi) Per unit peak kW winter impacts per measure
(vii) Per unit incremental cost per measure
(viii) Measure life
(ix) Net-to-gross ratio per measure
(x) Rebate per measure
(xi) Program costs not applicable to individual measures (but instead to bundles of measures)
(xii) Avoided gas, GHG, electricity and water costs per applicable unit if impact (per m3, kWh, peak kW, tons of GHG, liters of water, etc.)

(b) Regarding Enbridge's cost-effectiveness analysis of heat pumps, please provide the following:
(i) The portion of heat pumps that would be of each of the four types of installations (1) sized to cooling loads so that they displace maybe half (or thereabouts) of annual gas heating and use a gas furnace to meet significant portions of heating needs; (2) strike a balance between heating and cooling capacity, with gas furnaces still meeting a substantial portion of annual heating needs; (3) would displace the large majority of gas use but still use gas furnaces to meet winter peak demands; (4) all-electric (i.e., fully displacing gas, with electric resistance back-up). Please provide as dollar and percentage values.
(ii) All assumptions, underlying calculations of and sources for the assumed savings, costs and measure lives used in Enbridge's calculation of the cost-effectiveness of heat pumps of each of the four types of heat pumps it is proposing to rebate.
(iii) Whether the assumptions used by Enbridge to assess cost-effectiveness of heat pumps is the same as or different than those used by Guidehouse in the recent Achievable Potential Study. If they were different, please explain why.
(iv) How impacts on winter electric peak demand were estimate for each of the four types of heat pumps the Company is proposing to rebate, including whether any of the heat pump types other than the all-electric option (fully displacing gas) are assumed to increase electric peak demand (and associated grid costs) and why.
(v) Impacts on cooling efficiency. Specifically, did Enbridge account for improvements to cooling efficiency benefits (energy and summer peak) that cold climate heat pumps can provide, relative to standard central air conditioners? If so, please provide such assumptions and explain how they were derived. If not, why not?
(vi) Reductions in electricity consumption associated with reduced gas furnace run time.
(vii) Whether electrical panel upgrades and/or other electric work would be required to install a heat pump and, if so, at what average cost and measure life?
(viii) Benefit-cost results at the measure level, provided separately for each of the four different types of heat pumps the Company references.
(ix) Assumed switchover temperatures and heating capacity at those temperatures.

(x) Avoided capital cost assumptions (e.g. avoided furnace and/or A/C replacement).

(c) Please compare the heat pump assumptions with those made in the Guidehouse report regarding the cost-effectiveness of heat pumps prepared for Enbridge. Please provide that Guidehouse report and the excel model underlying it (or a link to where it has been provided previously in evidence and confirmation that Enbridge does not object to said materials being referred to in this proceeding). Please also provide any internal Enbridge excel spreadsheets examining the cost-effectiveness of heat pumps.

(d) Please provide the same information listed in (a) for the PAC ratio calculations.

Interrogatory #D-ED/GEC-72

Reference: Exhibit D, Tab 3, Schedule 1 (Benefit-Cost Analysis)

Question(s):

(a) With respect to the TRC and PAC figures for heat pumps, please provide a breakdown of the expected spending ($ and % in 2027) by the different heat pumps and different applicable types/configurations/uses of air source heat pumps (hybrid, all electric, etc.).
   (i) For each ASHP, please also list the switchover temperature, capacity at that temperature, and COP at that temperature.
   (ii) For each, please also list the TRC ratio and PAC ratio.
   (iii)Please provide this in a live excel spreadsheet.

(b) Could Enbridge bring the TRC ratio to 1 by making the eligibility criteria regarding COP stricter?

(c) Please discuss the pros and cons of strengthening the efficiency eligibility criteria for ASHPs.

(d) Based on the NEEP or NRCan databases, please list the 3 most efficient Midea air source heat pump units with the HSPF, and the COP at the switchover temperatures underlying the TRC figures. Please also provide the same information for the most efficient unit that can be paired with a gas furnace in a hybrid setup.

(e) Does Enbridge agree that Midea is generally considered to be an affordable heat pump manufacturer?

(f) If the NRCan sizing guide routinely overestimates heating load, and that was corrected in the cost-effectiveness calculations, would that impact the benefit-cost ratio, and if yes, how (i.e. positively or negatively)?

Interrogatory #D-ED/GEC-73

Reference: Exhibit D, Tab 3, Schedule 1 (Benefit-Cost Analysis)

Question(s):

(a) Please compare the cost-effectiveness of Enbridge's DSM program in reducing greenhouse gas emissions with that of its existing RNG program and its proposed new RNG program. Please do this by completing the following table:

Cost-Effectiveness of GHG Reductions – DSM v. RNG			
	DSM (all resource acquisition)	**RNG Program** (existing)	**RNG Program** (previously proposed)
$/CO2e			

For the DSM figures, please account for the full costs and benefits of DSM per the TRC-plus test for the lifetime of the measures. If possible, please exclude carbon price impacts. If lifetime net benefits have not be calculated, please make best efforts to estimate them (e.g. using the first-year benefits, the WAML, and any other necessary assumptions).

Interrogatory #D-ED/GEC-74

Reference: Exhibit D, Tab 3, Schedule 1 (Benefit-Cost Analysis)

Question(s):

(a) Please provide the documentation followed by Enbridge to determine which costs and benefits it accounts for in the TRC and PAC tests.
(b) Please define and describe the TRC and PAC tests and the differences between them.
(c) What test does the IESO use?
(d) Please provide the documentation used by IESO for energy efficiency cost-effectiveness testing.
(e) What is Enbridge's position on increasing emphasis on the PAC test (or making it the primary test) in order to achieve greater consistency with the IESO's test, to provide symmetry in cost/benefit considerations (seeing as the TRC accounts for all costs but not all benefits), or other reasons.

Interrogatory #D-ED/GEC-75

Reference: Exhibit D, Tab 6, Schedule 1 (Regulatory and Stakeholdering)

Preamble: The OEB's Report Back to the Minister re Intervenors and Regulatory Efficiency (September 27, 2024) states as follows:

> When investigating opportunities for efficiency, the OEB also considered applicant costs. Applicants are not currently subject to the same cost award tariff or review process as intervenors, and significant costs are incurred by applicants at ratepayer expense to justify rate changes. For example, in the five largest electricity rate applications filed since 2018, applicants incurred an average of $6,000,000 per application in legal and consulting costs. The average cost for intervenors for legal and consulting costs in those same applications was roughly $756,000. **Although the OEB reviews applicant costs, they currently do not receive the same scrutiny as intervenor cost awards, which are subjected to a separate standalone hearing after the issuance of the OEB's main decision on each case. Therefore, the OEB is of the view that greater scrutiny of applicant costs could also produce cost savings for ratepayers.**

Question(s):

(a) Please provide an estimate of the total costs that Enbridge will incur in preparing its application and throughout the proceeding (excluding intervenor costs). Please provide a breakdown between external consultant costs, external legal costs, and internal resources. Please also provide a breakdown between the various consultants, please do so. This information is relevant, among other things, to the appropriateness of Enbridge's proposed regulatory and stakeholder budgets, the OEB's report noted above, and an assessment of the appropriateness of intervenor costs (including potential objections to intervenor costs by Enbridge).

Interrogatory #D-ED/GEC-76

Reference: Exhibit D, Tab 7, Schedule 1 (Municipal Engagement)

Question(s):

(a) To help the OEB understand the municipal engagement activities that are and are not funded via the DSM budget, please provide a listing of the staff titles for roles relating to municipal engagement. For each job title, please provide a description of their roles, the number of FTEs, the job postings, and whether the position is funded in whole or in part via the DSM budget.
(b) Table 1 on page 7 lists 6 line items. Please provide a description of each.
(c) How does Enbridge decide which municipalities to support?
(d) Please list all municipal engagement projects over the past 3 years with a description of each, including total cost, timing, recipient (where applicable), etc.
(e) Please provide copies of reference or educational materials used in or generated by the municipal engagement team.
(f) Does table 1 on page 7 include staffing (i.e. salaries)? If not, please reproduce table 1 including all costs attributable to municipal engagement relating to DSM, including staff positions.
(g) Is it still the case that senior municipal advisors are required to "[a]dvocate for the continued use of natural gas and its role as a low carbon option in the development of Municipal Energy Plans."[1] If not, please explain.

Interrogatory #D-ED/GEC-77

Reference: Exhibit D, Tab 7, Schedule 1 (Municipal Engagement)

Question(s):

(a) Please describe Enbridge's engagement with municipalities aimed at asking municipalities to lobby the province to lower the leave-to-construct threshold. Please indicate which staff positions were involved in those activities and whether any such

[1] https://www.rds.oeb.ca/CMWebDrawer/Record/745848/File/document

positions were funded in whole or in part via the DSM budget. Please provide the materials used in this campaign, such as template municipal resolutions and letters.
(b) Please provide the same information requested in (b) but in relation to efforts to ask municipalities to lobby the government in support of legislation to overturn the decision in the Enbridge rates case, phase 1.

Interrogatory #D-ED/GEC-78

Reference: Exhibit D, Tab 7, Schedule 1 (Municipal Engagement)

Question(s):

(a) Enbridge's DSM plan in EB-2021-0002 proposed spending $1.7 million on "municipal engagement" (Exhibit E, Tab 4, Schedule 1, Page 5). Please provide a side-by-side comparison of municipal engagement and support under that plan and the proposed plan for 2026-2030, including the activities planned, the number of staff, the staff titles, the budgeted amounts, and the relevant DSM budget lines include the municipal engagement.
(b) Please provide a detailed breakdown of all proposed activities, staffing, and spending relating to municipal engagement for each year over 2027-2030.
(c) To help give a sense of the work that Enbridge's municipal DSM staff do, please provide a copy of the presentations they gave to municipalities in the past year.
(d) In EB-2023-0343, Exhibit I.ED-47, Enbridge stated that it has municipal advisors for each operating region (Eastern Region, GTA East Region, GTA West Region, Northern Region, Toronto Region, Southeast Region, and Southwest Region). Are these municipal advisor positions funded with the DSM budget?
(e) Do the municipal advisor positions referred to in (d) work with staff in DSM-funded positions? If yes, how?

Interrogatory #D-ED/GEC-79

Reference: Exhibit D, Tab 8, Schedule 1 (Research and Innovation)

Question(s):

(a) Please provide excerpts of all directions in the OEB's latest DSM decision relating to research and innovation. For each direction, please indicate whether Enbridge proposes that the direction be carried through and apply to the 2026-2030 term. For any that Enbridge believes should be abandoned, in whole or in part, please explain Enbridge's rationale for abandoning the direction and what has changed since the previous DSM decision to justify this.

Interrogatory #D-ED/GEC-80

Reference: Exhibit D, Tab 8, Schedule 1 (Research and Innovation)

Question(s):

(a) Please provide table showing how much research, development, and innovation spending Enbridge has funded out of the O&M envelope over the past 10 years and projected as far forward as possible. This is relevant, among other things, to the need for additional funding from the DSM budget and the appropriate budget levels.
(b) Please provide a breakdown of the research, development, and innovation spending from O&M funding over each of the past 5 years broken down by (a) spending relating to gas heat pumps, (b) spending relating to other gas equipment, (c) spending relating to fuel switching away from gas, (d) spending relating to building envelope improvements, and (e) other. If the same information is available on a forecast basis, please provide that as well.
(c) Please list all research, development, and innovation projects funded by Enbridge over the past 5 years, broken down by (i) funding via O&M spending and (ii) funding via the DSM budget.

Interrogatory #D-ED/GEC-81

Reference: Exhibit D, Tab 8, Schedule 1 (Research and Innovation)

Question(s):

(a) Please provide a list of all projects or program spending from the DSM research and development budget that is currently planned or under consideration. Please include a brief description, the relevant year, and approximate magnitude of spending. We understand that this information will inherently be tentative and subject to change. It will nevertheless help us better understand with more specificity how the proposed funds will be spent.
(b) Please provide a list of all spending from the DSM research and development budget during the current DSM term. Please include a brief description, the relevant year, and approximate magnitude of spending. We understand that this information relates only to the current plan period. It will nevertheless help us better understand with more specificity how the proposed funds will be spent going forward.
(c) Please also provide the above listing for the proposed innovation budget.

Interrogatory #D-ED/GEC-82

Reference: Exhibit D, Tab 8, Schedule 1 (Research and Innovation)

Question(s):

(a) Please provide a table showing, for each year in the DSM term, the total proposed research and development spending and the total proposed innovation spending. Please also include as much of a breakdown as possible, including a breakdown of the innovation sector by spending.

(b) The evidence includes a listing of project types. Please provide the approximate proportion of the overall budget (%) for each project type. Please provide separate responses for the research and development budget and the innovation budget.

Interrogatory #D-ED/GEC-83

Reference: Exhibit D, Tab 8, Schedule 1 (Research and Innovation)

Preamble: Some background relevant to these questions can be found in this Volts podcast regarding thermal energy networks that are being piloted by gas utilities, entitled *Thermal energy networks are the next big thing*

Question(s):

(a) Would Enbridge be open to considering a thermal energy network or district geothermal pilot for existing customers under the research and development fund and/or the innovation fund? Please explain the answer and indicate if there are any conditions or restrictions that Enbridge would require before considering such a pilot.
(b) Would Enbridge be open to considering a thermal energy network or district geothermal pilot for a new residential development under the research and development fund and/or the innovation fund? Please explain the answer and indicate if there are any conditions or restrictions that Enbridge would require before considering such a program.

Interrogatory #D-ED/GEC-84

Reference: Exhibit D, Tab 8, Schedule 1 (Research and Innovation)

Question(s):

(a) If the OEB were to direct that the research, development, and innovation programming be delivered by a third-party in consultation with Enbridge, or that part of this programming be delivered in that way, which organizations does Enbridge believe would be best suited to do so? Please comment on the IESO and the Toronto and Region Conservation Authority's Sustainable Technologies Evaluation Program as potential third parties?
(b) What factors would need to be considered in addressed in developing full or partial third-party delivery of this programming?

Interrogatory #D-ED/GEC-85

Reference: Exhibit D, Tab 8, Schedule 2 (Research and Development)

Question(s):

(a) Please list the membership and sponsorships funded over the past 5 years and those Enbridge expected to fund over the next five years. Please indicate each membership organization and sponsorship recipient and the amount allocated to each.

(b) What is the Voice for Energy? How much does Enbridge pay in support of Voice for Energy, either directly or indirectly through an industry association? Which industry associations/groups provide funding to Voice for Energy? Has Enbridge ever provided funding to any of those associations/groups from the DSM budget? If yes, which one and how much?
(c) Does Enbridge agree that "[t]he research, development and market data budget will not be used for investigating natural gas technologies where a more cost-effective electric alternative exists" as indicated in its 2026-2030 application? If yes, what gas technologies are and are not covered by that criterion?
(d) What gas technologies has Enbridge investigated in 2023, 2024, and 2025 with its DSM research and development funding? How much has it spent on each?

Interrogatory #D-ED/GEC-86

Reference: Exhibit D, Tab 8, Schedule 3 (Energy Innovation Fund)

Question(s):

(a) Enbridge states on page 4 that its innovation programming would include community energy initiatives that would "innovative planning, process optimization, and retrofit strategies that enhance energy efficiency across entire communities." Who would the partners be in such programming? What role would Enbridge employees and Enbridge contractors play? How would Enbridge ensure that any advice is fuel-neutral (i.e. avoid a gas bias)?

Interrogatory #D-ED/GEC-87

Reference: Exhibit D, Tab 10, Schedule 1 (DSM Plan Inputs)

Question(s):

(a) Please provide spreadsheets containing the fully granular DSM plan inputs for all inputs. Please provide any underlying internal spreadsheets used to calculate those inputs with live formulas.

Interrogatory #D-ED/GEC-88

Reference: Exhibit D, Tab 10, Schedule 1 (DSM Plan Inputs)

Question(s):

(a) Enbridge states on page 3 that "The input assumptions are informed by internal analysis and TRMs from other jurisdictions." Please provide the values in table 1 for the TRMs in all other jurisdictions that Enbridge considered. Please also provide the internal analysis cited above. Please also explain how Enbridge landed on the final figures in light of the multiple data inputs and provide any relevant calculations or documentation.

(b) To the extent that they are not included in the response to (a), please provide all calculations and spreadsheets underlying Table 1 on page 4.
(c) Enbridge states on page 5 that "For the purpose of claiming energy savings results, Enbridge Gas will use the researched values provided to the EC following the TRM process outlined in Section 8.5 of the DSM Framework, rather than the placeholder values provided above." Please confirm that Enbridge will benefit, all other things equal, if the placeholder values are conservative and the researched values show better performance (e.g. via greater savings).
(d) Would Enbridge agree to also update its targets based on researched input assumptions, not only the savings results?

Interrogatory #D-ED/GEC-89

Reference: Exhibit D, Tab 10, Schedule 1, Table 1 (DSM Plan Inputs)

Question(s):

(a) How did Enbridge arrive at the switchover temperatures? Are they proposed to be at the level that will maximize savings?
(b) Many electric heat pumps can be controlled to eliminate demand during peak periods. If that is implemented by the customer (or as a requirement of the program) how would that impact the cost-effectiveness of this measure? What would the TRC+ ratio be before and after that change?
(c) What does Enbridge assume for free ridership and spillover for heat pump water heaters?
(d) What temperature does the IESO assume at the time of the winter electricity system peak in Toronto and other major customer centres in Ontario?
(e) Why does Enbridge assume a winter peak electric impact for the 4A heat pump with a switchover temperature of 0°C? Wouldn't the heat pump not operate at the time of winter peak?
(f) Please answer the same question as in (e) for the heat pumps with switchover temperatures of approximately 3.8 0°C and 8.3 0°C?
(g) For the heat pump that is sized on the design heating load (4D):
    (i) How was the kW figure arrived at?
    (ii) What temperature is assumed at the time of winter peak to result in a 5.474 kW contribution to winter peak?
    (iii) Does the estimate include a diversity figure (i.e. to reflect that not 100% of the units will fully operate during the peak time)?
    (iv) Does Enbridge account for the savings from a customer disconnecting from the gas system (e.g. the annual O&M costs attributable to a customer)? Please explain the answer and include the TRC savings that would result from a customer disconnecting from the gas system (e.g. the annual O&M costs attributable to a customer).
(h) How are avoided gas transmission and distribution costs addressed for the measures in table 1? Please provide the relevant figures and calculations.
(i) Does Enbridge account for the electric load of gas furnaces? If yes, please explain how it was accounted for. Please quantify that load, both peak (kW) and annual (kWh).

Interrogatory #D-ED/GEC-90

Reference: Exhibit D, Tab 10, Schedule 1, Attachment 1 (DSM Plan Inputs)

Question(s):

(a) What are the measure lifetimes (i.e. EULs) longer for building envelope improvements like insulation that will last for the lifetime of the building in question?

Interrogatory #D-ED/GEC-91

Reference: Exhibit D, Tab 10, Schedule 1, Attachment 3, p. 2 (DSM Plan Inputs)

Question(s):

(a) Please provide the full assumptions, calculations, and spreadsheets underlying the avoided gas costs and avoided electricity costs. Please include a breakdown that includes the components listed in Ex. D-10-1, p. 5-6.
(b) Please prepare a side-by-side table comparing Enbridge's assumed avoided electricity costs with those that would be used if following IESO's guide to assessing the avoided electricity costs from reducing line losses.[2] Please explain and discuss any differences.
(c) Please prepare a side-by-side table comparing Enbridge's assumed avoided electricity costs with those that are set out in the IESO's Cost-Effectiveness Tool.[3] Please explain and discuss any differences.
(d) Enbridge's previous application (Exhibit D, Tab 9, Schedule 1, p. 6) stated that it "proposes using a single average stream of avoided electricity energy costs ($/kWh) that is based on the IESO's time-of-use avoided cost categories and load profiles applicable to the Company's DSM measures." Is that still the case?
    (i) Please provide the load profiles the Company is using, explain how they were developed, and provide the calculations used to develop a single avoided value per kWh.
    (ii) How did Enbridge determine what load profile to use to develop a single avoided electricity cost given that the seasonality and daily hours of use of electricity are likely to be significantly different for different measures?
(e) Please prepare a side-by-side table comparing Enbridge's assumed avoided gas costs with those set out in the IESO's Cost-Effectiveness Tool.[4] Please explain and discuss any differences.
(f) Please explain the original use for the IESO figures that the Enbridge proposes to use for avoided electricity costs and provide a copy of any correspondence with the IESO relating to those figures.

[2] https://www.ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/Transmission-Planning-Guideline-Transmission-Losses.pdf
[3] https://ieso.ca/-/media/Files/IESO/Document-Library/EMV/IESO-CDM-CE-Tool-V9-7-January-28-2025.xlsb
[4] https://ieso.ca/-/media/Files/IESO/Document-Library/EMV/IESO-CDM-CE-Tool-V9-7-January-28-2025.xlsb

Interrogatory #D-ED/GEC-92

Reference: Exhibit D, Tab 10, Schedule 1 (DSM Plan Inputs)

Question(s):

(a) Please explain Enbridge's approach to calculating avoided gas transmission and distribution costs.
(b) When was that approach developed?
(c) When were the current figures for avoided gas transmission and distribution costs calculated?
(d) For the five most recent AMPs please provide:
    (i) The forecast capital spending on growth-related capital (i.e. capital driven by increases in demand);
    (ii) The forecast total annual gas demand (nominal and weather normalized);
    (iii) The forecast total peak gas demand (nominal and weather normalized);
    (iv) A link to (or copy of) the AMP.
    Please also indicate what categories of capital spending Enbridge is including in growth-related capital.

Interrogatory #E-PP-93

Please provide the references and calculations to support the information the cost comparison chart in Exhibit E, Tab 2, Schedule 1, Attachment 1, Page 2. If the assumptions are based on third party assumptions, please provide those references.

Interrogatory #E-PP-94

Reference: Table 1, HRS Program (Residential Whole Home Offering): Eligibility Package Characteristics [E/2/2, page 4]

Please explain the details and differences between package 2 and package 4. Please also provide the program marketing materials that explain this information and how it applies to each incentive offered.

Interrogatory #E-PP-95

Please provide all the program and incentive information that incents a dual fuel system (i.e. gas furnace and electric heat pump).

Interrogatory #E-PP-96

Reference: The previous requirement that new furnaces installed alongside an electric heat pump must be part of an eligible combination unit (per NRCan's list) has been removed. Feedback from contractors indicated that NRCan's list did not reflect a wide range of feasible furnace and electric heat pump combinations. [E/2/4, page 4]

Please provide the feedback from contractors and Enbridge outreach to identify and attempt to resolve the concerns of Enbridge.

Interrogatory #E-PP-97

Please explain why Enbridge's DSM program offering does not propose to provide low income customers a free ccASHP like the IESO program does for customers using electricity, oil, propane or wood.

Interrogatory #E-PP-98

a) Please explain why it is not more efficient and effective to outsource the Energy Education and Outreach offerings to entities that can include all relevant energy and GHG savings, not just natural gas.

b) Has Enbridge considered partnering or outsourcing the Energy Education and Outreach offerings to parties such as the IESO, City of Toronto or other entities already doing these activities? If no, why not. If yes, please provide details.

Interrogatory #E-PP-99

Reference: The OEB ordered Enbridge to file a copy of the Partnership Agreement between Enbridge and the IESO for the Home Renovation Savings ("HRS") Program. [Per EB-2024-0198 Exhibit JT1.6 Plus Attachment and Decision_Confidentiality_PO 7_ EGI DSM Plan_20250829].

a) Has there been any updates to the HRS Partnership Agreement or execution of any related agreements? If yes, please file a copy of those documents.

b) The term of the IESO/Enbridge HRS Partnership Agreement ends December 31, 2027, but the Agreement includes a provision that extensions could be executed for 2028, 2029 and 2030. If an extension has been put in place, please provide the documentation. If not, how does Enbridge know that the HRS Agreement will be extended beyond 2027.

c) Please provide the annual EM&V budgets under the Agreement related to the HRS Program and the split of those annual costs paid by Enbridge and IESO.

d) Has Enbridge entered other program or partnership agreements (or similar arrangement such as an MOU) with IESO that could lead to results during the 2027-2030 DSM term? If yes, please provide copies of those agreements. If not, why not.

Interrogatory #E-ED/GEC-100

Reference: Exhibit E, Tab 1

Preamble: On page 5, Enbridge states:

As the primary natural gas DSM program administrator in Ontario, Enbridge Gas will continue to evolve DSM programs and offerings over the course of the DSM Plan term based on lessons learned and in consideration of evaluation results, to respond to changing market conditions, to balance cost-effectiveness, and to pursue collaboration opportunities with the IESO and other parties. Enbridge Gas may modify incentive levels, eligible measures, and approaches to market as necessary, in compliance with the DSM Framework.

Question(s):

(a) The above quote suggests unfettered discretion to "modify incentive levels, eligible measures, and approaches to market" as long as such modifications are "in compliance with the DSM Framework." Is this a correct interpretation of the above passage? If not, please list and detail the limits on said modifications.

Interrogatory #E-ED/GEC-101

Reference: Exhibit E, Tab 1

Question(s):

(a) Please provide a side-by-side table comparing the programming approved for the rollover, the programming approved in EB-2021-0002, and the current proposed plan for the following details:
    (i) Customer eligibility;
    (ii) Eligible incentives;
    (iii) Budgets; and
    (iv) Incentive levels.

Interrogatory #E-ED/GEC-102

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Question(s):

(a) During that stakeholder discussions that occurred in June of 2024, Environmental Defence asked Enbridge to include duct sealing as a measure in its residential program. Please provide details on how Enbridge took this request into consideration, including the results of any research and analysis that was completed.
(b) We understand that June of 2024 was a busy time. If Enbridge did not get the opportunity to review duct sealing as a measure in detail, please do so as part of this proceeding. In particular, please estimate the cost-effectiveness of rebates for aerosol-based duct sealant on a best-efforts basis. Two sources, one from the National Renewable Energy Laboratory and one from the National Association of State Energy Officials, are included

in the footnotes as a potential source of information to estimate the cost-effectiveness of this approach.[5] Those papers also cite other research that is available on this technology.

(c) Is Enbridge willing to commit to consider this measure further and potentially add it to its residential offerings during this DSM term?

Interrogatory #E-ED/GEC-103

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Preamble:

Starting on page 22, Enbridge provides details on the "consumer operational economics" for heat pumps. These questions explore that topic.

Question(s):

(a) Please provide any Enbridge spreadsheets that calculate the consumer operational economics of heat pumps.

(b) Please update those spreadsheets to account for:
   (i) Cooling savings;
   (ii) OESP rebates for low-income customers;
   (iii) $0.23/m3 savings for customers in gas expansion areas; and
   (iv) Avoided fixed charges for customers who fully electrify their homes.

(c) Please provide a table estimating the cooling savings for a typical customer installing a heat pump in Toronto, using assumptions that are consistent with the TRM, for both a full electric system and a hybrid system (if they differ, please explain why). Please provide the underlying assumptions and calculations. Please include, for example, the assumed kWh savings versus a traditional air conditioner and the $ savings arising therefrom. For the $ savings, please indicate how tiered versus time-of-use rates are accounted for.

(d) Please provide a table showing the incremental OESP rebates a qualifying customer will receive with electric vs. gas heating, broken down by income and household size.

(e) Please provide an updated version of Exhibit E, Tab 2, Schedule 1, Attachment 1, Page 1 and the excel spreadsheet underlying that attachment, including the formula, assumptions, and outputs.

Interrogatory #E-ED/GEC-104

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Question(s):

(a) Condensing and heat pump clothes dryers can reduce gas use in two ways. First, they are ventless and therefore prevent conditioned air from being vented to the atmosphere as occurs in a traditional dryer. Second, they are more efficient replacement to a gas dryer.

[5] https://www.nrel.gov/docs/fy22osti/82616.pdf; https://naseo.org/Data/Sites/1/documents/maddie_koewler/rfi-design/aeroseal.pdf.

Has Enbridge considered including rebates for these? If yes, please provide any documentation and Enbridge's reasoning.

(b) Please estimate the lifetime gas savings from each of the two ways that heat pump and condensing clothes dryers can reduce gas use noted above.

(c) Is Enbridge willing to commit to consider this measure further and potentially add it to its residential offerings during this DSM term?

Interrogatory #E-ED/GEC-105

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Question(s):

(a) Please provide a table showing the total residential program budget for each year and a breakdown of that budget into the offerings and enabling activities shown in table 5 on pages 14-15.

Interrogatory #E-ED/GEC-106

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Question(s):

(a) Does Enbridge agree that the current process whereby customers cover the full cost of the measures while waiting for the rebate cheque to arrive reduces participation? Please explain and estimate the percentage of participation lost to this factor.

(b) Please estimate the number and percent of residential customers that cannot participate in the some or all of the residential DSM offerings because they do not have the funds to comfortably cover the full cost of the measures while they wait for the rebate cheque to arrive.

(c) Please provide a table showing the average annual time it has taken Enbridge customer to receive rebate cheques after their final audit has been completed over the past 5 years and forecast over 2026-2030.

(d) How many customers applied for the HER+ rebate after installing the measure but were declined? Please provide a breakdown of the total by the reason for a declined application.

(e) Does Enbridge believe the situation described in (c) could lessen trust in Enbridge's programs and reduce participation, all other things being equal?

(f) Does Enbridge agree that the current process whereby customers cover the full cost of the measures while waiting for the rebate cheque to arrive reduces participation in part because they are not 100% certain that the rebate will be approved?

Interrogatory #E-ED/GEC-107

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Question(s):

(a) Please provide the latest copy of the Residential End User Study (REUS).

Interrogatory #E-ED/GEC-108

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Question(s):

(a) Please provide the steps that must be taken for customers to access the single measure and heat pump offerings. Please provide a copy of the documentation they must complete.
(b) Over the past five years, what is the longest period a customer has had to wait to receive a rebate cheque?
(c) For each year over the past five years, please provide the average wait time for customers between completion of the relevant documentation and receipt of the rebate cheque. Please provide the same information on a forecast basis for 2027 to 2030.
(d) If the historic information in (c) is available on a more granular basis (monthly or quarterly), please provide it, ideally in an excel spreadsheet.
(e) On average, how long does it take between a customer paying for a measure and the completion of the relevant documentation required for the rebate?

Interrogatory #E-ED/GEC-109

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Question(s):

(a) Would Enbridge require approval from the OEB to change some or all of its offerings under the residential program to avoid the need for customer to cover the full cost of the measures and wait for rebate cheques to arrive?
(b) Does Enbridge agree that this would increase participation and reduce free ridership?
(c) Please discuss how the process for providing instant rebates for customers undertaking equipment purchases in the single measure offering could be designed. Please discuss the options and the pros, cons, and incremental costs of each.
(d) Please discuss how the process for providing instant rebates for customers in the single measure offering undertaking building envelope improvements could be designed. Please discuss the options and the pros, cons, and incremental costs of each.
(e) To the extent that they are not discussed in (c) and (d), please list the challenges in providing instant rebates (versus the current system where the customer carries the full cost until the rebate cheque arrives) and discuss solutions to each.

Interrogatory #E-ED/GEC-110

Reference: Exhibit E, Tab 2, Schedule 1 (Residential Program)

Preamble: These questions relate to the following SAG recommendation at p 43 of its report:

> Single Measure: Non-utility members supported the inclusion of the single measure offer and recommended: …
> **b. Enbridge consider upstream and/or midstream incentives for heat pump water heaters to help impact the market, similar to the approach taken in Vermont, Connecticut and Massachusetts.**

Question(s):

(a) Please summarize the rationale for the above-noted bolded recommendation based on Enbridge's discussions with the SAG experts. Please also, more generally, discuss the benefits of upstream/midstream incentives (e.g. ability to harness contractor promotion, lack of paperwork for consumers, no need for customer to carry up-front costs, etc.).
(b) If Enbridge were to adopt this recommendation, roughly how would it do so? For example, would it focus on HVAC contractors or wholesale suppliers, or both?
(c) Did Enbridge decide against this recommendation or simply defer a final decision on it until a future date (e.g. a potential additional item for the mid-term review)? Please summarize Enbridge's position on this recommendation and any potential next steps.
(d) Would Enbridge agree to consider putting forward an upstream or midstream offering along these lines at the mid-term review (if one is ordered)?
(e) Please discuss Enbridge's overall thinking with respect to upstream/midstream incentives. If Enbridge were to implement additional upstream/midstream incentives for other measures elsewhere in its portfolio, which would be the prime candidates? Generally speaking, when are upstream and midstream incentive programs most effective?

Interrogatory #E-ED/GEC-111

Reference: Exhibit E, Tab 2, Schedule 2 (Residential Program, Whole Home Offering)

Question(s):

(a) Please clarify what the minimum air leakage requirement would be in order for air sealing to count as one of two required measures? What is the rationale for the threshold requirement? If it is less than a 20% reduction in leakage, would Enbridge consider raising it to 20% so that reductions that are by-products of just adding insulation (rather than intentionally pursuing blower-door guided air sealing) do not count as a "second measure"? If not, why not?

Interrogatory #E-ED/GEC-112

Reference: Exhibit E, Tab 2, Schedules 2, 3 & 4 (Residential Program)

Question(s):

(a) Please provide a table indicating, for each year, the forecast spending on each of the "enabling activities" listed in Schedules 2, 3, and 4 and the total for all enabling activities.
(b) What entities or staff people will design and deliver the enabling activities?
(c) Which of the enabling activities would be more and less complicated to contract out to a third party?

Interrogatory #E-ED/GEC-113

Reference: Exhibit E, Tab 2, Schedule 3 (Residential Program, Single Measure Offering)

Question(s):

(a) Please provide a list of additional measures that are currently or potentially under consideration for addition to the single measure program.
(b) Is Enbridge open to allowing customers to receive the air sealing incentive if they seal their ducts with aerosol-based process (i.e. Aeroseal)?

Interrogatory #E-ED/GEC-114

Reference: Exhibit E, Tab 2, Schedule 4 (Heat Pumps)

Question(s):

(a) Please provide the rationale and underlying calculations that served as the basis for developing the incentive levels for cold climate heat pumps and heat pump water heaters.
(b) Please provide the full program details and eligibility rules for the heat pump measures, including how customers will need to establish appropriate sizing (if still applicable). For additional clarity, please attach the documentation that will need to be completed and submitted to secure the incentive levels. A draft is sufficient.
(c) The NRCan sizing guide is only a guide and is not accurate in all circumstances. If Enbridge reinstates a different incentive for a full heating load installation, would Enbridge agree that customers can receive the maximum incentive if certification that the gas furnace has been removed on the assumption that the heat pump is meant to meet the full heating load?
(d) Please compare the assumed annual heating loads via NRCan's sizing guide against actual data on gas use and home characteristics.

Interrogatory #E-ED/GEC-115

Reference: Exhibit E, Tab 2, Schedule 7 (Energy Education and Outreach)

Question(s):

(a) Does Enbridge commit to ensuring that the energy education and outreach provided to customers in the education and outreach program will be fuel agnostic (i.e. not gas biased

or skewed against measure that involve electrification)? If yes, in what proceeding would the parties and the OEB be able to confirm whether that commitment was honoured?
(b) Which entity will develop the tips?
(c) Would Enbridge be willing to outsource this program entirely to a non-profit organization, including the program design?
(d) How does Enbridge differentiate between standard program marketing and advertising versus the "energy education and outreach offering" to "[t]o promote and build awareness of Enbridge Gas's DSM offerings that can support identified energy efficiency projects"?
(e) The energy education and outreach offering has a budget ranging from $2.4 million in 2027 to $3.4 million in 2030. Please provide a detailed breakdown of how this money will be spent. With respect to staffing, please provide job titles, descriptions, postings, and FTE numbers.

Interrogatory #E-ED/GEC-116

Reference: Exhibit E, Tab 2 (Residential Building Beyond Code Offering)

Question(s):

(a) Why is Enbridge proposing to eliminate the building beyond code offering?
(b) Please provide the materials (e.g. presentations, guides, etc.) used in the training workshops held in 2025 for the Building Beyond Code offering. Materials that are largely duplicates need not be provided (e.g. the same presentation that was delivered in different training sessions).
(c) Please provide the criteria for a Net Zero Energy Ready home (an attachment is sufficient).
(d) Please provide further information on the types of homes with NZER certification. Are they typically infill, single construction, or part of developments? What is a typical price range for these homes? Anecdotal information based on a discussion with program participants is sufficient.
(e) What are the expected gas savings per NZER home? Please provide in both m3 and as a % of average consumption of a baseline code home.
(f) What is the estimated average incremental cost to build to the NZER standard? Please provide the basis for the estimate.

Interrogatory #E-ED/GEC-117

Reference: Exhibit E, Tab 2 (Other Residential Programming)

Preamble: Some background relevant to parts (d) to (f) of these questions can be found in this Volts podcast regarding thermal energy networks that are being piloted by gas utilities, entitled *Thermal energy networks are the next big thing*

Question(s):

(a) Please provide a table showing for each year over 2027-2030: (i) the forecast number of new construction residential customers that Enbridge forecasts connecting to its system, (ii) the forecast peak and annual consumption thereof.
(b) Is there other programming that Enbridge is considering for the new construction residential market now or in the future?
(c) Does Enbridge agree that new construction is often the most cost-effective time to implement energy savings?
(d) Has Enbridge considered getting involved in providing district geothermal in new developments as a way to (i) provide demand-side management to a greater proportion of new construction homes, (ii) diversify the assets on which it earns a return, and/or (iii) capitalize on its expertise in putting pipes in the ground (which is required for district geothermal).
(e) What legislative changes, licence changes, or other regulatory changes would be needed (or beneficial) for Enbridge to implement a program whereby it would provide district geothermal systems in new developments and recoup the cost via a heating as a service model as part of its regulated business?
(f) Does Enbridge believe it is likely that some developers would be open to district geothermal systems in their developments if the cost of the pipes and the systems were recouped from homebuyers via a heating as a service model?

Interrogatory #E-ED/GEC-118

Reference: Exhibit E, Tab 3, Schedule 2 (Income Qualified)

Question(s):

(a) Enbridge states as follows: "While electric heat pumps reduce natural gas and offer efficiency gains, they involve fuel switching and can increase electricity costs, especially if the home previously lacked air conditioning. For this reason, implementing them in the income qualified sector would not be appropriate, as it could raise energy costs for individuals already facing financial constraints." Why would Enbridge not offer this on a case-by-case basis where the customer economics were positive?
(b) Please provide a live spreadsheet with the calculations showing that a heat pump is most likely to raise energy costs for an income qualified customer.

Interrogatory #E-ED/GEC-119

Reference: Exhibit E, Tab 3, Schedule 3 (Affordable Housing Multi-Residential Offering)

Question(s):

(a) Please provide a listing of incentives and qualifying criteria for this sector and the changes therein over the past 5 years.
(b) Please provide a live spreadsheet with the calculations showing that a heat pump is most likely to raise energy costs for affordable housing providers (if that is Enbridge's view). Please provide all assumptions.

(c) Over the past five years, when Enbridge has provided incentives for affordable housing multi-residential customers for heat pumps, what kind have they been (e.g. unit-by-unit mini-splits with one or two heads)? Please provide the approximate breakdown by type.

Interrogatory #E-ED/GEC-120

Reference: Exhibit E, Tab 4, Schedule 2 (Commercial Custom Program)

Question(s):

(a) For each type of incentive listed in Table 1 on p. 7, please provide the comparable incentive levels (per m3 and maximums) for the past 5 years.

Interrogatory #E-ED/GEC-121

Reference: Exhibit E, Tab 4, Schedule 3 (Commercial/Industrial Prescriptive Program)

Question(s):

(a) For each measure listed in Table 1 on p. 6 please provide:
    (i) Enbridge's best estimate of the size of the eligible market (i.e., the number of customers each year that would be candidates for installing the measure)
    (ii) Forecast participation by year for 2027 through 2030
    (iii) The incentive levels offered this year and in each of the past 5 years
    (iv) Actual participation rates in each of the past 5 years

Interrogatory #E-ED/GEC-122

Reference: Exhibit E, Tab 4, Schedule 4 (Commercial/Industrial Direct Install Program)

Question(s):

(a) Does Enbridge plan to jointly deliver this program with the IESO? If not, why not? Please detail any discussions Enbridge has had regarding the potential for joint delivery to facilitate direct installation of both gas and electric measures.
(b) Would Enbridge agree that this is the kind of program for which there could be significant cost savings from joint gas/electric delivery – i.e., by sharing costs of recruiting customers, on-site assessments, etc.? If not, why not?
(c) Would Enbridge agree that this is the kind of program for which joint delivery of gas and electric measures could make customer recruitment easier by increasing the potential energy saving benefits offered? If not, why not?

Interrogatory #E-ED/GEC-123

Reference: Exhibit E, Tab 4, Schedule 5 (Commercial/Industrial Upstream Program)

Question(s):

(a) The incentive amounts shown in Table 1 on p. 6 are labeled "passthrough incentive". Does that mean that they do not include the portion of the incentive paid to participating dealers, suppliers or distributors? In any case, please provide a version of Table 1 that includes (1) a column listing the passthrough incentive for customers as well as (2) a new column that shows the additional dealer/supplier/distributor incentive and (3) a column that shows the total incentive offered.
(b) Why did Enbridge make its commercial heat pump rebate a downstream offer rather than an upstream offer? Why wouldn't an upstream approach be more effective?
(b) For each measure listed in Table 1 please provide:
    1. Enbridge's best estimate of the size of the eligible market (i.e., the number of customers each year that would be candidates for installing the measure). Please clarify whether any of the estimates are based on equipment turnover assumptions.
    2. Forecast participation by year for 2027 through 2030
    3. The incentive levels offered this year and in each of the past 5 years
    4. Actual participation rates in each of the past 5 years

Interrogatory #E-ED/GEC-124

Reference: Exhibit E, Tab 5, Schedule 2 (Industrial Custom Program)

Question(s):

(a) Enbridge is proposing an incentive of $0.45 per gross m3 for the first 75,000 m3, with an incentive of $0.25/m3 for savings above that level. What is the rationale for a higher incentive for the first tranche of savings and a lower incentive thereafter?
(b) Wouldn't the lower incentive for additional savings lead customers to be less comprehensive, at least in any given year (i.e., to defer additional investments to another year when they could get the higher incentive under a new project)? If not, why not?
(c) Enbridge suggests that one reason for the declining incentive proposal is that smaller customers have greater barriers to efficiency investments and typically don't have projects that exceed 75,000 in annual m3 savings. Couldn't that concern be addressed by having an incentive structure that pays more for smaller customers and less for larger customers? If not, why not?

Interrogatory #E-ED/GEC-125

Reference: Exhibit E, Tab 6, Schedule 1 (Large Volume Program)

Question(s):

(a) Please provide an approximate comparison by annual demand between the customers covered by the previous definition of the Large Volume Program and those covered by the new definition.

Interrogatory #E-ED/GEC-126

Reference: Exhibit E, Tab 6, Schedule 1 (Large Volume Program)

Question(s):

(a) Please provide a breakdown of the net savings (m3) arising from Enbridge's large volume program for each program year over the current and previous DSM plans. Please include for each year the lifetime savings of that year's programming. If lifetime savings are not available, please provide an estimate (e.g. based on the WAML) and also provide the first-year savings. By net savings, we refer to savings after accounting for free ridership.
(b) Does Enbridge agree that the savings described in (a) would not have occurred without Enbridge's large volume program because those savings figures are net of free ridership?
(c) Does Enbridge stand by the results listed in (a) as being accurate and in accordance with the DSM framework and auditing process?

Interrogatory #E-ED/GEC-127

Reference: Exhibit E, Tab 6, Schedule 1 (Large Volume Program)

Question(s):

(a) If no large volume customers were to opt-out (or if the opt-out proposal is rejected), what net savings (m3) would Enbridge forecast from its large volume program for each program year over 2027-2030? Please include for each year the lifetime savings of that year's programming. If lifetime savings are not available, please provide an estimate (e.g. based on the WAML) and also provide the first-year savings. By net savings, we refer to savings after accounting for free ridership.
(b) Please provide the same information in (a) but on the assumption that the opt-out proposal is approved by the OEB and the number of large volume customers opts-out equal to Enbridge's forecast (or the results of its survey, if no forecast exists).

Interrogatory #E-ED/GEC-128

Reference: Exhibit E, Tab 6, Schedule 1 (Large Volume Program)

Preamble: The OEB's previous DSM decision stated as follows:

> "IGUA suggested that the basis of this framework would be that customers seeking opt-out should have to demonstrate that efficiency and decarbonization

commitments over a multi-year period are in line with those anticipated in Enbridge Gas's current application from this program." (p. 41)

The following is an excerpt from the oral hearing in the previous DSM proceeding:

> MR. MONDROW: Thank you. And the second general suggestion you made, as I recall, was that Enbridge should implement an opt-out option for those customers. Do you still believe that is a good idea?
>
> MR. NEME: I do. I think I suggested in the past something to the effect that if a customer could through an independent audit by an expert with expertise in that type of business, that they aren't paying for, so that it is not someone who is just doing their bidding, can demonstrate that they've captured all of the efficiency or the overwhelming majority of efficiency that is available within a seven- or eight-year pay-back period, they should be allowed to opt out.
>
> I don't think there are very many customers that will meet that criteria, but there may be a couple, and they should have that opportunity.[6]

Question(s):

(a) Does Enbridge's proposed program require that customers "demonstrate that efficiency and decarbonization commitments over a multi-year period are in line with those anticipated in Enbridge Gas's current application from this program." If not, why not? If yes, then how?
(b) Please provide all communications and meeting notes from Enbridge's stakeholder discussions regarding an opt-out program that address the possibility that opting out would require demonstrating that certain criteria regarding efficiency levels were met (as discussed in the preamble).
(c) Please comment on the merits of IGUA's proposal as noted above.
(d) Please comment on the merits of Mr. Neme's proposal as noted above.
(e) If Enbridge were to require that large volume customers "demonstrate that efficiency and decarbonization commitments over a multi-year period are in line with those anticipated in Enbridge Gas's current application from this program", what kind of auditing and verification would Enbridge undertake?
(f) Please provide all research or analysis conducted by Enbridge on a potential mechanism for large volume customers to demonstrate the efficiency levels they would achieve without a DSM program as a condition of program participation.

Interrogatory #E-ED/GEC-129

Reference: Exhibit E, Tab 6, Schedule 1 (Large Volume Program)

Preamble: The OEB held as follows in EB-2015-0029 / EB-2015-0049:

[6] EB-2015-0029 / EB-2015-0049, Transcript Volume 4, p. 157-158.

The DSM Framework highlighted two concerns with mandated rate funded DSM for the large volume customer class. First, the OEB was of the view that large volume customers would already be competitively motivated to ensure that their systems were efficient. The OEB found the evidence of the expert witnesses, which was that large volume customers would not initiate all cost-effective conservation if DSM programs similar to those offered until 2015 were not available, compelling. Furthermore, the expert evidence was that in jurisdictions which offered an "opt-out" provision, large volume customers did not actively pursue all available conservation and when given the opportunity to demonstrate that they had spent an equivalent amount of money on conservation, the large volume customers did not avail themselves of this option. Submissions from parties also made it clear to the OEB that the lost opportunity for natural gas savings from this customer segment would be substantial.[7]

Question(s):

(a) Does Enbridge agree with those findings? Why or why not? If Enbridge agrees with only some of those findings, please identify each separately and explain why or why not.

Interrogatory #E-ED/GEC-130

Reference: Exhibit E, Tab 6, Schedule 1 (Large Volume Program)

Preamble: In the previous OEB proceeding, the expert for Board Staff confirmed that "there is a large body of literature that has shown that there is still plenty of cost-effective efficiency in large customers."[8] Optimal Energy confirmed that there are many reasons why competitively motivated large volume customers do not implement all cost-effective energy efficiency, including:

- They have limited capital, and therefore need an incentive to put their scarce resources towards energy efficiency;[9]
- They do not have perfect or complete information about what energy efficiency measures are available and their relative benefits;[10]
- Managers have limited time and other priorities to deal with, meaning that conservation does not get the attention necessary for the achievement of all cost-effective conservation;[11] and
- Corporate managers have incentives to focus on initiatives with significantly shorter payback periods.[12]

[7] Decision and Order, EB-2015-0029 / EB-2015-0049, January 20, 2016, p. 50
[8] EB-2015-0029 / EB-2015-0049, Transcript Volume 5, p. 119.
[9] *Ibid.,* p. 121, ln 6.
[10] *Ibid*., p. 121, ln 13.
[11] *Ibid*., p. 121, ln 18.
[12] *Ibid*, p. 121, ln. 24.

Question(s):

(a) Does Enbridge believe that there is a considerable amount of achievable and cost-effective DSM potential among its large volume customers?
(b) How much achievable and cost-effective DSM potential did the OEB's Achievable Potential Study identify among large volume customers?
(c) Does Enbridge agree that competitively motivated large volume customers typically do not implement all cost-effective energy efficiency, including for the four reasons listed in bullets above from the testimony of the Board Staff expert? Please explain and elaborate.
(d) Does Enbridge agree that each of the following are reasons that competitively motivated large volume customers do not implement all cost-effective energy efficiency:
    (i) They have limited capital, and therefore need an incentive to put their scarce resources towards energy efficiency;[13]
    (ii) They do not have perfect or complete information about what energy efficiency measures are available and their relative benefits;[14]
    (iii) Managers have limited time and other priorities to deal with, meaning that conservation does not get the attention necessary for the achievement of all cost-effective conservation;[15] and
    (iv) Corporate managers have incentives to focus on initiatives with significantly shorter payback periods.[16]

Interrogatory #E-ED/GEC-131

Reference: Exhibit E, Tab 6, Schedule 1 (Large Volume Program)

Question(s):

(a) Do all gas generators have an incentive to be as efficient as possible in their use of gas? Are some gas generators able to recoup gas costs through their contracts and therefore not fully incented to implement energy efficiency? Please provide a response with reference to the specific mechanics applying to contracting in place with gas generators in the province.

[13] *Ibid.,* p. 121, ln 6
[14] *Ibid*., p. 121, ln 13.
[15] *Ibid*., p. 121, ln 18.
[16] *Ibid*, p. 121, ln. 24.