ENBRIDGE GAS INC.
DSM MULTI-YEAR PLAN AND FRAMEWORK

Written Interrogatories of Enbridge Gas Inc. to OEB Staff

(Exhibit L.OEB STAFF.1)

Issue 7

7-EGI-1-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Executive Summary page i)

Preamble:

"This report looks at the North American landscape of cost recovery and performance incentives for energy efficiency plans, in support of future ratepayer funded natural gas demand side management (DSM) plans approved by the Ontario Energy Board (OEB)."

Question:

a) Was Optimal Energy sole sourced to complete this report or did Optimal respond to an RFP? What additional details regarding the scope of work for this research/report were provided to Optimal beyond the details included in OEB Staff's summary of evidence submitted to the OEB on September 15, 2021? Please provide copies of the complete RFP and responses thereto and all documentation exchanged with respect to scope of work and engagement of Optimal Energy.

b) Please produce any and all communications (including copies of emails, letters and draft reports with comments received from OEB Staff) between Optimal Energy and OEB Staff regarding the content of the reports submitted into evidence?

c) Did Optimal Energy undertake any communication with any of the other expert witnesses or parties that have also submitted evidence in the proceeding regarding Optimal Energy's efforts in drafting its expert evidence? If so, please provide all details including topics of discussions and copies of notes and correspondence.

d) Did Optimal Energy have any communications with respect to other expert evidence? If so, please provide details including topics of discussions and copies of notes and correspondence.

7-EGI-2-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Executive Summary Page iii)

Preamble:

Amortization Consideration 3: Performance Incentive – as discussed in greater detail below amortization approaches can combine cost recovery and performance incentives. However, we do not recommend this approach. Rather, we suggest approaching the performance incentive separately from the cost recovery approach, as is currently done in Ontario. This eliminates compounding performance earnings and higher costs to ratepayers.

Amortization Consideration 4: Lost Revenues – these are recurring annual expenses and should not be amortized with program costs. We suggest continuing the current practice in Ontario and allowing for annually recovery and incorporating into future forecasts.

Question:

Please describe in greater detail how your recommendation for "approaching the performance incentive separately from the cost recovery approach, as is currently done in Ontario" and "continuing the current practice in Ontario and allowing for annually recovery" of lost revenues would be combined with your recommendations to amortize program cost recovery. At a minimum, please include the following details:

a) Specifically, do you recommend that cost recovery in an individual year be calculated as:

    i. Amortization of Program Costs (PC), plus full Performance Incentive (PI), plus full Lost Revenue (LR), i.e.:
    $PC_{amortized} + PI + LR$
    ii. Amortization of the sum of Program Costs/Performance Incentive/Lost Revenue, i.e.:
    $(PC + PI + LR)_{amortized}$
    iii. Some other approach. If so, please describe.

b) Please describe your recommendations for the timing of calculating and recovering performance incentives and lost revenue relative to the program year for which they apply. (e.g., for 2023 performance, when would performance incentives and lost revenues be calculated, and over what period would amounts be recovered?)

7-EGI-3-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 4

Preamble:

"Because utility investment in efficiency programs does not create a traditional capital “asset” through ownership and control of the efficiency energy resource (e.g., the customer-owned efficient equipment) and the on-going nature of utility efficiency investments, traditionally it has been treated as operating costs, with full recovery every year, roughly contemporaneous with the spending."

Question:

In drafting its report, did Optimal Energy explore recent developments in Ontario, including the OEB's July 22, 2021 Decision and Order on Enbridge Gas Inc. (EB-2020-0091) Integrated Resource Planning Proposal wherein the OEB decided project costs related to alternatives to infrastructure builds (which could include potentially geo-targeted energy efficiency or demand response) should only be eligible for inclusion in rate base where Enbridge Gas owns and operates the asset. Where Enbridge Gas does not own or operate the assets, these costs would be categorized as O&M and recovered as an operating expense? If not, does review of this decision impact your recommendations. Please explain. How, did/does this recent OEB Decision factor into Optimal Energy's recommendations?

7-EGI-4-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 4-5

Preamble:

Optimal Energy proposes that amortization of all or some portion of efficiency investment can provide benefits including the following:

"may allow ratepayers to benefit from Federal and Provincial tax accounting practices to defer some payments interest free",

and:

"Potentially creates positive net present value to ratepayers because the utility’s cost of capital is generally lower than that of private consumers, who also tend to have high implicit discount rates."

Question

Please further elaborate or explain each of these statements and how each would occur?

7-EGI-5-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 7

Preamble:

"Further, the average rate of return for US utilities is over 10%,[9] which is significantly greater than what is shown necessary to incent utilities for efficiency spending."

Question:

a) What level is shown to be necessary to incent utilities (both gas and electric) to spend on efficiency, and what evidence from Canada/U.S. supports that conclusion?

b) What evidence exists to illustrate and differentiate the rate of return necessary for utilities who are subject to mandated energy efficiency delivery requirements vs. those who are not and undertake such efforts on a voluntary basis?

7-EGI-6-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 7

Preamble:

Implementation Details

Question:

In the event the gas utility is faced with the task of adapting the approach for cost recovery of DSM budgets from the current full contemporaneous rate recovery to an amortized model, the gas utility is interested in implementation timelines following an OEB decision. Please detail the process including how long such an exercise has taken in the other jurisdictions to appropriately consider/determine/execute on the various details and complexities involved so as to ensure a well-considered evolution if required, for the both the utility and ratepayers.

7-EGI-7-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Executive Summary page 9

Preamble:

"With reasonable interest rates, savings for the ratepayers are high enough in the early years under amortization that the net cumulative costs of an amortization approach are always lower than the net cumulative costs of full annual recovery. This is particularly true if the deferred taxes are triggered and credited to ratepayers."

Question:

Please provide an example in a live workbook, outlining all input assumptions to illustrate this statement. Please specifically address what constitutes "reasaonble interest rates" for the utility.

7-EGI-8-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Tables 1-4 on page 9-12

Question:

Regarding the analysis of costs and benefits of amortization, please provide:

a) All workpapers including live working calculations/spreadsheets, data inputs and assumptions, in their native form used to develop the graphs presented in Tables 1 through 4. Also detail the balance of unrecovered payments at the end of the period for each Table to illustrate the amount still outstanding.

b) A description of how taxes are treated in the analysis (i.e. are the expenses assumed to be fully tax deductible in the year of incurrence, or are they deducted for tax purposes over the amortization term?)

c) Confirmation that the discount rate reflected in Table 2 and Table 4 is only used to calculate notional cumulative savings of the recovery of efficiency expenses through the amortization or annual method, and does not impact the actual amounts recovered through rates charged to customers.

    i. Also, please confirm whether Optimal believes a 10% discount rate is appropriate, and if so why, and if not, what would be more appropriate.
    ii. Also please provide examples of any jurisdictions where the example illustrated in Table 2 is in place, where the discount rate applied is greater than the amortization interest rate.

d) Confirmation that this scenario illustrated in Table 3 is indicative of the actual costs that would be expected to be incurred by ratepayers.

e) A version of each of the live spreadsheet models with formulas intact which compares the cost to ratepayers of the current full contemporaneous cost recovery vs. a fully amortized schedule of costs that would accrue to ratepayers up to and including the terminal year of amortization and reflects five years of DSM budgets including $150 million in year one escalated by 5% annually for four further years, amortized for a 16 year term (to reflect the average measure life as proposed by Optimal Energy).

7-EGI-9-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 13

Preamble:

Table 5: Summary of Jurisdictions Using Amortization for Cost Recovery

Questions:

a) Please confirm that for jurisdictions where the interest rate is noted to be the "Rate of Return" or "Approved Rate of Return" Optimal is referring to the return on equity, and that in those cases the unamortized efficiency costs are assumed to be fully funded by equity (as opposed to through debt and equity or the utility's capital structure).

b) In jurisdictions where amortization of energy efficiency spending has been instituted, has the treatment been in compliance with local financial accounting guidelines (i.e. USGAAP), and if not how has the accounting been handled by the utility?

c) Please provide support for the treatment of amortization in Missouri, including:

   i. Identification of utilities currently using amortization to recover program cost
   ii. If amortization is only used to recover a portion of total portfolio costs, a description of program costs recovered through amortization
   iii. Copies of legislation requiring or allowing amortized cost recovery
   iv. Copies of Commission orders requiring or allowing amortized cost recovery
   v. Detailed explanation of the reasoning used to justify that short term debt costs adequately compensate the utilities for amortizing program costs over a 5 year period.

d) Please provide support for the treatment of amortization in Delaware , including:

   i. Identification of utilities currently using amortization to recover program costs
   ii. If amortization is only used to recover a portion of total portfolio costs, a description of program costs recovered through amortization
   iii. Copies of legislation requiring or allowing amortized cost recovery
   iv. Copies of Commission orders requiring or allowing amortized cost recovery

7-EGI-10-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 13

Preamble:

"In others, such as Maryland, it was a decision by the relevant regulatory agency[16]."

Question:

a) This statement refers to Maryland however the reference provided by Optimal Energy at footnote number 16 links to a New Jersey Public Utilities document. Please provide the correct reference for the noted Maryland decision.

b) Please describe in greater detail the current situation and challenges in Maryland facing the utility and ratepayers in the face of the cost recovery situation wherein over $800 million of unamortized program costs remain outstanding.

7-EGI-11-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 16

Preamble:

We believe that the amortization of program expenses could be an elegant way to increase overall spending on gas efficiency programs so that a greater level of overall natural gas savings can be achieved in Ontario while avoiding sudden, large rate increases by aligning the timing of the costs and benefits of the programs.[24]

Question:

a) Please indicate the reference or instruction from the OEB which documents the desire to expand programs and forms the basis for the evidence provided.

b) Given that in its December 1, 2020 letter, the OEB stated it anticipates modest budget increases to be proposed by Enbridge Gas, and given that Enbridge Gas has therefore proposed a 2023 DSM budget approx. 7.7% greater than the 2021 and 2022 OEB approved budgets, based on Optimal Energy's recommendation regarding amortization being "contingent on a desire to expand the programs", at what budget increase does Optimal Energy believe consideration of amortization of DSM program expenses would be appropriate?

7-EGI-12-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 17 and Executive Summary page iii)

Preamble:

"The terms of amortization should be set to properly compensate the utility for the carrying costs of the related debt, but not to provide a rate of return. This has been done effectively in many jurisdictions with smaller and more controllable performance incentives that can be separately set." (page 17)

and,

[24] This statement is contingent on a desire to expand the programs. We would not recommend amortization without an accompanying expansion in the efficiency program goals and costs.

"We therefore recommend that the interest rate be set at the utility cost for borrowing money, or the short-term carrying cost of debt."' (Amortization Consideration 1, page iii)

and;

"We suggest using the same loan term for all programs and sectors and basing it on a fixed number of years, approximately representing the average measure life of a typical efficiency portfolio." (Amortization Consideration 2, page iii)

Question:

a) Optimal Energy's statement on page 17 seems to contradict Table 5 on page 13 which includes seven jurisdictions with the majority using the Approved Rate of Return (or WACC) and, only one, Missouri (electric only) which compensates utilities for carrying costs using the cost of debt. Please describe all other jurisdictions that apply the cost of debt as carrying costs for amortized cost recovery for DSM portfolios. For each jurisdiction and/or utility referenced, please provide:

    i. The amortization term
    ii. How the cost of debt is calculated (e.g., short term vs. long term debt; capitalization weighting)
    iii. Reasoning used/circumstances in the jurisdiction to justify how the cost of debt adequately compensates the utilities for the carrying costs incurred to amortize program costs over the amortization period

b) Please describe how your recommended interest rate per Amortization Consideration 1 would property compensate Enbridge Gas for the carrying costs it will incur to recover program costs over your recommended loan term per Amortization Consideration 2 (which would approximate 16 years based on the current average measure life of the Enbridge Gas DSM portfolio).

Issue 8

8-EGI-13-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1 - Executive Summary page iii)

Preamble:

"We also perform a survey of PIs in other jurisdictions, looking at the target amount, threshold amount, cap, and how the PI is calculated in general. We look with greater detail at the mechanisms used in New York, Illinois, and Massachusetts, as these states

all have high performing efficiency programs but calculate the performance incentives very differently."

Question:

Optimal Energy has elected to look in detail at the performance incentives of New York, Illiniois and Massachussets. Please confirm that gas utilities in each of New York, Illinois and Massachusetts are mandated, in accordance with legislated state policy to delivery energy efficiency programs including binding energy savings targets and this is not consistent with Ontario where the implementation of DSM programming is a voluntary business function.

8-EGI-14-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1 - Executive Summary page vi)

Preamble:

Recommendation 13 and Recommendation 14

Question:

Please explain the difference between Recommendations 13 and 14

8-EGI-15-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1 - Executive Summary page vii)

Preamble:

Recommendation 17: We recommend considering establishing the overall performance incentive amount as a percent of net benefits, in advance of the planning process. This way, while higher proposed savings (and/or lower budgets) in the efficiency plan would still make it harder to achieve or exceed the full target incentive, it would also increase the overall pot of money available for earnings.

Question:

Given the direction provided by the OEB on December 1, 2020 in the DSM Letter, when would Optimal Energy propose this recommendation might be implemented in Ontario?

8-EGI-16-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 1

Preamble:

"[U]nder traditional regulation, investor-owned utilities (IOUs) have inherent disincentives to pursue aggressive energy efficiency ...key disincentives include lost revenues from lower sales and foregone earnings from not getting a rate of return on efficiency program investment."

Question:

Can Optimal Energy confirm that its recommended cost recovery approach is that capitalized/amortized DSM costs would be entirely funded by debt (as opposed to debt and equity - as performance incentives would be kept separate)? If so:

a) Does Optimal agree that their recommendation does not alleviate the disincentive of foregone earnings that investor owned utilities face in pursuit of energy efficiency? If not, please explain.

b) Does Optimal agree this would result in annual DSM activities being eligible for performance incentives only in the year in which they occur, as opposed to over an extended period as would be the case if a return on equity was included in the funding?

c) Is Optimal aware that Enbridge Gas is required to maintain an OEB approved capital structure for its regulated utility operations (currently 36% equity and 64% debt)? How would Enbridge Gas maintain this requirement if it were to finance all capitalized/amortized DSM costs solely through debt financing?

8-EGI-17-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 2

Preamble:

"To address the foregone earnings opportunity, some sort of positive return on efficiency investment can be provided. This can be from simply providing the same rate of return (ROR) on efficiency investments as is earned from supply-side investments, putting efficiency and supply on a relatively equal footing. Alternatively, many jurisdictions have pursued more nuanced mechanisms that can provide similar earnings opportunities but are based on the IOU's performance in delivering efficiency, rather than simply an ROR on investment. Because these performance incentives (PIs) create incentives to strive for exemplary performance (and potentially penalties for poor performance) rather than rewarding spending, they can be a superior policy approach."

Question:

Please provide specific evidence of examples from other jurisdictions of performance incentive mechanisms (including specifically for gas utilities), that are based on performance in delivering efficiency, that can provide similar earnings opportunities to an ROR on investment, and include illustrations of how they would work

8-EGI-18-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 21, footnote 35

Preamble:

"From a financial opportunity cost perspective, a utility should be indifferent between a dollar lost and a dollar gained. However, in actuality, it is likely utilities may respond more aggressively to avoid penalties than to earn awards simply because they perceive penalties as associated with failure, where awards are viewed as incentives for exceeding expectations."

Question:

Please provide references from the jurisdictional research that support this assertion.

8-EGI-19-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 41

Preamble:

"Further, most PI designs give utilities a relative windfall incentive when the threshold is reached, for example giving 75% of the target incentive amount immediately upon reaching 75% of target."

Question:

Please confirm that payouts in the Enbridge Gas proposal are lower between 75% and 100% than the incentive payouts given in "most PI designs" as summarized in the table below.

	Payout %	
Performance	Enbridge proposal	Most PI's
75%	50%	75%
85%	70%	85%
95%	90%	95%
100%	100%	100%

Issue 8c

8c-EGI-20-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Executive Summary page v)

Preamble:

Recommendation 7: We recommend simplifying the performance incentive structure using a main metric based on net benefits for 70% of the incentive amount. Specifically, we recommend adapting Program Administrator Cost (PAC) net benefits, plus carbon, to avoid the potentially contentious challenges of estimating participant costs and benefits as can be the case when using Total Resource Cost (TRC)-Plus net benefits3. While this diverges from a pure focus on gas savings in physical units, we believe net benefits is a better and more comprehensive approach. Gas savings will produce the vast majority of benefits, so the two are highly correlated, and it still directly provides the incentive to maximize savings. However, it also ensures utilities value such things as cost efficiency, capacity benefits, and longevity of savings.

Question:

a) As outlined by OEB Staff in its description of expert evidence submitted to the OEB on September 15, 2021, "The first report is related to Issue 7[1] and will generate expert analysis on energy efficiency cost recovery approaches and performance incentives in other jurisdictions [emphasis added] (the Cost Recovery and Performance Incentive Report). Please provide specific references to identify which other jurisdiction(s) Optimal's recommended performance incentive structure (found at Page v of the Cost Recovery and PI Report, Executive Summary) is in place (specifically using a main metric based on net benefits for 70% of the incentive amount based on a Program Administrator Cost (PAC) net benefits, plus carbon).

b) Please confirm that a program with a positive PAC result does not necessarily result in total lower costs to customers. If confirmed, please explain why not. If not confirmed, please explain why.

c) In recommending that net benefits should be determined utilizing PAC/UCT as opposed to TRC, Optimal Energy suggests this "ensures utilities value such things as cost efficiency, capacity benefits and longevity of savings" (page 39). Please explain how PAC would include capacity benefits. In your response, please be specific regarding how this differs from gas savings and TRC.

d) It is widely accepted that the cost-effectiveness test most appropriately utilized in a given jurisdiction should reflect the objectives for the energy efficiency framework of that jurisdiction. Please detail how each of the PAC/UCT and the current TRC-plus (15% NEBS and cost of carbon) compare in reflecting the OEB's stated primary/secondary objectives for DSM in its December 1, 2020 Letter (pages 2 and 3) as well as supporting other desired goals shared by the OEB, for example ensuring low income and small volume customers are well served?

e) How does Optimal Energy believe increasing the weighting on net benefits to 70% of the shareholder incentive opportunity vs. approximately a 1/3 weighting in Enbridge Gas's proposal, impact how the utility may be incented to refocus efforts on large industrial customers vs. low income, hard-to-reach or small volume customers highlighted as a priority by the OEB in its December 1, 2020 DSM letter?

Issue 9

9-EGI-21-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Executive Summary page iv)

Preamble:

Recommendation 1: We recommend moving from the proposed annual targets and metrics approach to a true multi-year approach, where budgets and targets are cumulative for the full 5-year plan period, and the performance incentive is ultimately determined based on the Enbridge Gas's performance towards achievement of the end-of-term targets.

Question:

a) Please confirm that in its December 1, 2020 DSM Letter the OEB stated: "The OEB encourages Enbridge Gas to develop a longer-term natural gas savings reduction target, separate from the annual targets, that it will work to achieve by the end of the next multi-year DSM term", clearly indicating the expectation for annual targets in Enbridge Gas's DSM proposal.

b) Enbridge Gas is interested in better understanding this recommendation. Please provide an illustrative example that shows all relevant details, including full term Perfomance Incentive, annual measurement and interim payments for PI, thresholds for earnings and earning caps both annually and on a full term basis, and impacts to ratepayers based on when payments are made.

c) Please provide references and details for jurisdictions where this structure (i.e. a true multi-year plan as described in the preamble above) has been already been adopted.

9-EGI-22-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, page 28

Preamble:

Table 6: Summary of Performance Incentives by Jurisdiction

Question:

Please provide the detailed metrics, incentive structure, threshold and maximum amount for each of the jurisdictions listed in Table 6. Please also clearly indicate which data in the Table pertains to gas utility programs as opposed to electric.

Issue 9a

9a-EGI-23-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Executive Summary page v)

Preamble:

"If, during the course of the first two years of the multi-year plan, Enbridge Gas is of the view that new evaluation results or changing market conditions have made it unreasonable to hit established targets, we suggest that they formally propose updated targets as part of the mid-term modification process described above." (Recommendation 6);

and,

"We also recommend that the OEB fix the avoided cost assumptions that are used in plan development for the duration of the plan, or update the target to account for changes in avoided costs beyond Enbridge Gas‘s control. This way, the utility will not be rewarded or punished for increases or decreases in avoided costs that they cannot do anything about." (Recommendation 9)

Question:

a) Please confirm that the principle being recommended is to adjust targets mechanically for factors beyond the control of the utility (for example baseline changes).

b) Please clarify and list in your response which avoided costs are within Enbridge Gas's control and which are not or if all are outside Enbridge Gas's control. Where an avoided cost is considered within the control of the utility, please provide the basis and explanation for this position

c) Please clarify why Optimal Energy believes Enbridge Gas should not be impacted by avoided costs beyond Enbridge Gas's control but should be impacted by changing market conditions beyond their control unless a specific request for relief is made and approved.

9a-EGI-24-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, Executive Summary page v)

Preamble:

"We recommend that no automatic updates to savings targets be made in response to information from the OEB's EM&V process such as net-to-gross ratios."

Question:

Please confirm that this treatment would be applied equally to both increases and decreases in NTG ratios.

Issue 10c

10c-EGI-25-OEB.STAFF.1

Reference:

Exhibit L.OEB STAFF.1, pages 26 -27

Preamble:

Recommendation that Enbridge Gas - "Consider adding RCx/SEM/Energy Manger Programs." and "Enbridge Gas should work to improve the design of the old program rather than completely giving up on it. In particular, Enbridge Gas can look towards the example of Energy Trust and other successful administrators and, for example, create multiple participation tracks for companies that are not quite ready for a long-term commitment."

Question:

a) Please describe why a unique SEM and RCx program are required when Enbridge Gas has already incorporated enabling elements of the SEM program and RCx program into its Industrial and Commercial Custom offerings, providing customers with more flexibility to choose the level of commitment to that best suits their comfort levels?

b) In preparing this evidence, was Optimal Energy aware of the fact that the IESO has phased out its Energy Manager Program?