

ENBRIDGE GAS INC.

First Tracks Consulting Service In. Answers to
Interrogatories from OEB STAFF (OEB)

Exhibit I.7.EGI.STAFF.1

Reference: EGI Reply Evidence, p. 11, Figure 2

Questions:

- a) Please confirm that the cash flow analysis in figure 2 (amortization treatment of proposed 2023 DSM costs) would result in overall costs to ratepayers in excess of \$142M due to applying WACC over the 10-year amortization period.
- b) Please indicate what the incremental costs would be above the proposed \$142M base budget.

Response:

- a) The cash flow analysis in Figure 2 shows that the NPV of revenue requirements is equal to \$142 million, and so results in a discounted cash flow of \$0.
- b) There is no incremental cost in present value terms. In nominal (non-discounted) terms, the revenue requirements include \$142 million in amortization and \$44 million in cost of capital.

Exhibit I.7.EGI.STAFF.2

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Reference: EGI Reply Evidence, p. 11-35, Figures 1-14

Question:

Please provide all working files (live excel files) in an unlocked format that were used in conducting the analysis related to amortization of DSM costs, including that which developed Figures 1-14.

Response:

Four Excel files are provided.

- Enbridge Amortization FINAL NoTax." provides the analysis used to develop Figures 1-14 in the EGI Reply Evidence report, which, for simplicity, ignored tax effects.

I also updated the analysis to include tax impacts.

- “Enbridge Amortization FINAL TaxAsCapital” includes tax impacts, under the assumption that amortized DSM expenses are treated like physical assets for tax purposes.
- “Enbridge Amortization FINAL TaxAsXpense” includes tax impacts, under the assumption that amortized DSM expenses are treated like expenses for tax purposes, and the first-year tax benefit reduces first-year revenue requirements.
- Enbridge Amortization FINAL “TaxAsXpense Option 2.xlsx” includes tax impacts, under the assumption that amortized DSM expenses are treated like expenses for tax purposes, and the first-year tax benefit reduces the size of the created regulatory asset.

Exhibit I.7.EGI.STAFF.3

Reference: EGI Reply Evidence, p. 23

Preamble:

The report notes that “if the OEB approves a substantial budget increase, that it phase in the increase over several years. For example, other jurisdictions have phased in new and expanded portfolios over a period of one plan cycle...”

Question:

Please discuss and provide references to those jurisdictions that have phased in expanded portfolios.

Response:

I have not performed a comprehensive analysis of jurisdictions ramping up budgets, but some examples include:

- Consumers Energy (Michigan) electric budgets, which increased around 55% over the four-year period from 2018 to 2022. (<https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t0000001UWrKAAW>)
- Consumers Energy (Michigan) natural gas budgets, which increased around 44% over the four-year period from 2018 to 2022. (See references above for Consumers electric.)
- Eversource New Hampshire electric budgets, which doubled in spending in two successive plan cycles, phasing in increases over the three years of each cycle. See for example their latest settlement agreement, which plans 2023 spending at

44% above 2021 levels. ([2021-2023 New Hampshire Statewide Energy Efficiency Plan \(nh.gov\)](#))

- Statewide New Hampshire natural gas budgets, which increased spending by around 50% in two successive plan cycles, phasing in increases over the three years of each cycle. See for example their latest settlement agreement, which plans 2023 spending at 34% above 2021 levels. ([2021-2023 New Hampshire Statewide Energy Efficiency Plan \(nh.gov\)](#))
- Southern California Edison (California; electric only), which phased in a 25% increase over four years from 2017 to 2020. (<https://cedars.sound-data.com/filings/dashboard/SCE/2017/> and https://www.caeccc.org/files/ugd/0c9650_9bf95393f6e9424db1686bdf67bdf13c.pdf)
- ComEd (Illinois; electric only), which launched in 2009 and ramped up to around \$140 million over the first four years through 2012, then expanded again over the 2014-2017 period, by increasing around 50% in four years. (https://ilsag.s3.amazonaws.com/ComEd_EE_PY9_Q6_EOY.pdf)
- Xcel Energy (Colorado), electric budgets, which ramped up from around \$20 million to around \$80 million over the four years from 2008 to 2012. (<https://www.xcelenergy.com/staticfiles/xcel-responsive/Company/Rates%20&%20Regulations/Regulatory%20Filings/CO-DSM/2020%20Colorado%20DSM%20Annual%20Status%20Report.pdf>)
- Xcel Energy (Colorado), natural gas budgets, which ramped up from around \$2 million to around \$17 million over the three years from 2008 to 2011. (<https://www.xcelenergy.com/staticfiles/xcel-responsive/Company/Rates%20&%20Regulations/Regulatory%20Filings/CO-DSM/2020%20Colorado%20DSM%20Annual%20Status%20Report.pdf>)

Exhibit I.7.EGI.STAFF.4

Reference: EGI Reply Evidence, p. 23

Preamble:

The report notes “Enbridge already deploys one of the largest gas DSM portfolios in North America, and so substantial budget increases will likely require structural market changes to accommodate more funding.”

Questions:

- a) Please expand on what structural market changes may be required.
- b) Can Enbridge please discuss if any sort of market analysis has been conducted to determine what, if any, impacts an increased budget of greater than 25% of that which has been proposed would have on Enbridge’s ability to engage the necessary

trade allies and implementation partners. Please provide any internal analysis that supports your response, if available.

Response:

- a) Please see the discussion on pages 23-24 of my report addressing workforce quantity, quality, and equity. Also see the references provided in response to Exhibit I.7.EGI.STAFF.5.

b) Enbridge Gas response:

Enbridge Gas has conducted no such market analysis. In addition, it should be noted that an increased DSM budget of greater than 25% additional to that which has been proposed by the Company (which, at \$142 million, is approximately 7.7% larger than the 2022 OEB approved budget) would not be in line with the OEB's Direction for modest budget increases.

Exhibit I.7.EGI.STAFF.5

Reference: EGI Reply Evidence, pp. 23-24

Preamble:

The report suggests that if budget increases are ordered by the OEB, that a portion of the increased budget be used to develop increased workforce resources.

Questions:

- a) Please confirm that the workforce development funding example provided of Nicor Gas in Illinois is recovered from rate payers.
- b) Please discuss and provide references to any other utilities that, to First Tracks' knowledge, are approved of ratepayer funding to develop workforce resources in support of efficiency and conservation programming.
- c) Does Enbridge agree that it would be reasonable to use OEB-approved ratepayer funding to develop workforce resources to support its DSM programs? In your response, please discuss the nature of these workforce development activities in the Ontario energy efficiency context (for example, the IESO already offers training for energy managers).

Response:

a) Confirmed.

b) The following utilities and states fund workforce as part of their approved Energy Efficiency/DSM Plans:

- California utilities' Energy Efficiency Business Plans: <https://www.caeec.org/business-plans-1>
- Massachusetts utilities' approved 2022-2024 Energy Efficiency Plan: <https://ma-eeac.org/plans-updates/>
- Xcel Energy/MN order approving Conservation Improvement Plan: <https://efiling.web.commerce.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId=%7B90321F79-0000-C31D-91B0-F6D439DBAC93%7D&documentTitle=20214-173584-01>
- Eversource/NH settlement agreement: [2021-2023 New Hampshire Statewide Energy Efficiency Plan \(nh.gov\)](https://www.nh.gov/energy-efficiency-plan)
- DTE electric settlement agreement: <https://lnkd.in/g7MziGQS>
- DTE gas settlement agreement: <https://lnkd.in/gWAu-G4v>
- Nicor Gas approved Energy Efficiency Plan: [Illinois Commerce Commission Docket 21-0154](https://www.illinoiscommercecommission.gov/docket/21-0154)
- Peoples Gas and North Shore Gas approved 2022-2025 Energy Efficiency Plan: (<https://www.icc.illinois.gov/docket/P2021-0159/documents/308465/files/537701.pdf> and <https://www.icc.illinois.gov/docket/P2021-0159/documents/308465/files/537700.pdf>)
- ComEd approved Energy Efficiency and Demand Response Plan: (<https://www.icc.illinois.gov/docket/P2021-0155/documents/308442/files/537644.pdf>)
- Ameren Illinois approved Energy Efficiency and Demand Response Plan: (<https://www.icc.illinois.gov/docket/P2021-0158/documents/308478/files/537734.pdf>)
- ACEEE also provides a summary of workforce and other initiatives creating equity in opportunity here: <https://www.aceee.org/energy-equity-initiative>

c) Enbridge Gas response:

Enbridge Gas's understanding is that the workforce development funding referenced by First Tracks as available in Illinois, focuses on targeting resources to equity-focused populations and is currently provided under legislation. By contrast, Enbridge Gas is unaware of policy direction from the province or the OEB that signaled to the Company an interest or expectation to explore similar funding proposals directed to equity-focused populations in Ontario, specifically funded by gas ratepayers. Enbridge Gas urges that direction from the province and/or the OEB

would be appropriate and requisite before the Company propose or endorse something similar in Ontario.

Exhibit I.7.EGI.STAFF.6

Reference: EGI Reply Evidence, p. 24

Preamble:

The report notes “large budget increases will also eat into the rate savings generated by amortization, so the OEB will need to match increase to the specific amortization structure to stay within the historic rate guidance.”

Questions:

- a) Please confirm that the “historic rate guidance” referenced to here is approximately \$2/month for a typical residential customers which was provided in the 2015 DSM Framework.
- b) Please clarify what is meant by “the OEB will need to match increase to the specific amortization structure to stay within the historic rate guidance”.

Response:

- a) By historic rate guidance, I refer to the red line in Figure 9, which reflects Enbridge’s proposed DSM budgets through 2027 and then extended at inflation after that. It is my understanding that in developing these budgets, Enbridge followed historic guidance from the OEB in its 2015-2020 DSM Policy Framework and its December 1, 2020 letter outlining a Post-2020 Natural Gas Demand Side Management Framework.
- b) With amortization, revenue requirement levels depend on inputs for amortization term and cost of capital, and so the level of budget increase that could be accommodated without increasing revenue requirements above that outlined in Enbridge’s proposal (in the near term) will depend on the specific amortization structure (i.e., term and cost of capital). For example, as shown in Figure 10 of my report, a 16-year amortization term will accommodate a larger budget increase than a 5-year amortization term.

Exhibit I.7.EGI.STAFF.7

Reference: EGI Reply Evidence, pp. 24-25, Figure 9 and Figure 10

Question:

Please confirm that the analysis conducted to produce Figure 9 and Figure 10 only considered increases to the total DSM budget and did not contemplate specific changes to certain programs/sectors of Enbridge's DSM Plan (e.g., specific budget changes for any of the various programs proposed by Enbridge - residential, commercial, industrial, low-income, etc.).

Response:

Confirmed.

Exhibit I.7.EGI.STAFF.8

Reference: EGI Reply Evidence, pp.24-25, Figure 10

Preamble:

The report notes that "Figure 10 shows more modest increase of 20%...these scenarios track closer to the OEB's historic rate guidance..."

Question:

Please clarify that this statement assumes that an even budget increase across all programs and therefore a corresponding rate impact of 20% relative to historic impacts.

Response:

The "20%" represents an increase in Enbridge's proposed budget of 20%, along with continued inflation increases after 2027.

Exhibit I.7.EGI.STAFF.9

Reference: EGI Reply Evidence, p. 28

Preamble:

The report notes "I disagree with Optimal's recommendation to recover performance incentives by amortizing them along with other portfolio expenditures. This approach

greatly reduces the magnitude of shareholder earnings, and sends the wrong signal to Enbridge management.”

Questions:

- a) Does First Tracks agree that, if the performance incentive is amortized using the WACC, then, from Enbridge's perspective the net present value is the same whether or not it is amortized? Why or Why not?
- b) If First Tracks agrees, please explain how amortizing “greatly reduces the magnitude of shareholder earnings.”

Response:

- a) No. As I described on page 28 of my report, when paid as an expense, the performance incentive flows directly to shareholders. If the performance incentive was instead amortized at Enbridge's WACC, over the term of the amortization period, shareholders would only receive Enbridge's weighted average cost of capital, and not their full authorized return on equity. Using the rounded values from Table 1 in my report, shareholders would only receive 5.80%, instead of their full 9.0% authorized rate of return.
- b) See response to part a).

Exhibit I.7.EGI.STAFF.10

Reference: EGI Reply Evidence, p. 30

Preamble:

The report notes “I don't see how Enbridge could raise a billion dollars by promising investors only 4% returns.”

Questions:

- a) Please confirm that the \$1 billion figure referenced is cumulative over 20 years
- b) What is Enbridge's current debt?
- c) Does First Tracks agree that if Enbridge were to amortize the program costs using WACC as the interest rate, that it would be fully compensated for those costs related to carrying the debt?
- d) Please provide evidence supporting the statement that Enbridge would not be able to raise \$1 billion in debt over 20 years.
- e) Does the author think that Enbridge would be able to raise \$1 billion in debt for supply side investments over the next 20 years? Why or why not?

Response:

- a) As shown in Figure 6 of my report, with the 16-year amortization term recommended by Optimal Energy in its report, Enbridge's unamortized asset balance would exceed \$1 billion by 2030. With a 10-year term, the unamortized asset balance would exceed \$1 billion by 2034.

b) Enbridge Gas Response:

Enbridge Gas's current debt can be found in its publicly available financial statements for the year ended December 31, 2021.¹

- c) I'm confused by the word "debt" in the question since Enbridge raises capital through a combination of debt and equity. I agree that if Enbridge were to amortize the program costs using its authorized WACC as the cost of capital, then it would be fully compensated for its capital costs.
- d) I did not state that Enbridge would not be able to raise "\$1 billion in debt over 20 years". I instead said that "I don't see how Enbridge could raise a billion dollars by promising investors only 4% returns." Enbridge raises capital through a combination of debt and equity. If Enbridge was only compensated for amortized DSM costs at ~4%, then shareholders would receive only 4% returns instead of the ~9% returns they are authorized to receive from the OEB. This would hinder Enbridge's ability to raise the equity required to fund the amortization.
- e) Again, Enbridge does not fund supply side investments solely through debt, but instead raises capital through a combination of debt and equity. While I am not an expert in Enbridge's specific situation with regard to capital markets, I do believe that Enbridge would have an easier time raising capital for supply investments (compared to raising capital for DSM amortization where it was only allowed a 4% cost of capital), because it is my understanding the OEB provides Enbridge with costs of capital on supply investments that fully covers its costs of debt and equity.

¹ www.sedar.com or [Quarterly and Annual Reports - Enbridge Inc.](#)

Exhibit I.7.EGI.STAFF.11

Reference: EGI Reply Evidence, p. 31

Preamble:

The report notes “As I discussed in Section 2.1.1.2, the regulatory asset created by amortizing DSM expenditures is not as valuable or secure as physical assets like power plants or pipelines. For this reason, an argument could be made that even fully compensating Enbridge for its authorized ROE might not be enough to attract capital.”

Questions:

- a) Please provide all examples where previously approved Enbridge efficiency spending was later denied collection.
- b) If the OEB treats the amortized investment as an approved regulatory asset does that give Enbridge as much certainty of recovery of other asset investments? If not, why not?
- c) Does First Tracks agree that investments in physical assets carry risks that construction expenses might not be fully recovered if the asset does not become used and useful and/or if there are large unapproved cost overruns?
- d) Does First Tracks agree that once an efficiency program year is complete, the risk of denial of approved cost is very low? If no, why not?
- e) Does First Tracks agree that, given overall climate change mitigation risks and current or potential future Canadian or Ontario climate policies, that the risk of investments in physical gas assets with very long estimated lives and amortization terms carries some risk of becoming a stranded asset?

Response:

- a) In my statement, I was referring to the creation of a regulatory asset to recover DSM expenditures and how credit rating agencies and investors can view the long term recoverability of investments in these assets as less secure than that for physical assets. Because Enbridge has never amortized its DSM expenditures, I don't believe this question is relevant to my statement.
I do not have knowledge regarding Enbridge's recovery of historic expensed DSM expenditures.
- b) No. Please see my discussion in the first paragraph of page 14 of my report. Please also see response to Exhibit I.5.EGI.GEC.7 Part a.
- c) Yes.
- d) No. Please see my discussion in the first paragraph of page 14 of my report and my interrogatory response to Exhibit I.5.GEC.EGI.7 Part a.

e) Yes. Please see my discussion on pages 17-18 and footnote 12 of my report.

Exhibit I.7.EGI.STAFF.12

Reference: EGI Reply Evidence, p.34

Preamble:

The report notes that “[f]or similar reasons, I disagree with the broader policy conclusion that customer discount rates provide a reasonable framework for evaluating Ontario’s DSM policies, whether those policies address cost recovery policy or DSM cost-effectiveness. If Enbridge evaluated cost effectiveness using a higher, customer discount rate, many measures and programs currently delivered through the portfolio could be eliminated. The resulting portfolio would provide far fewer benefits to Enbridge customers, far smaller reductions in carbon emissions, and might not be delivered at all.”

Questions:

- a) Does First Tracks agree that, if two approaches to revenue collection have the same NPV from Enbridge’s perspective, then the approach with a higher NPV from the customer’s perspective should be chosen? Why or why not?
- b) Does First Tracks agree that it may make sense to use a different discount rate when evaluating which DSM programs and measures to offer (which may be about maximizing benefits from a societal perspective) than when determining the preferred rate structure used to collect the costs necessary to offer the programs while still fully compensating Enbridge (which may be about adopting rate impacts that are most preferred from a ratepayer perspective)? Why or why not?

Response:

- a) No. Please see my discussion in the last paragraph of page 34 of my report.
- b) I don’t agree that the choice of discount rate in calculating costs or savings from amortization is a useful framework for the OEB to use in deciding whether or not to use amortization. Please see my discussion in the last paragraph of page 34 of my report.

Issue 8 – Shareholder Incentives

Exhibit I.8.EGI.STAFF.13

Reference: EGI Reply Evidence, pp. 45-47

Preamble:

First Tracks included a performance incentive structure that it has referred to as a “compromise proposal”.

Questions:

- a) Please clarify if the “compromise proposal” is First Tracks’ recommendation to the OEB of the performance incentive structure that is in the best interest of ratepayer funded natural gas DSM.
- b) Please explain how First Tracks’ compromise proposal is in the public interest and protects ratepayer risks related to future DSM performance and overall costs and cost efficiency of ratepayer funding.

Response:

- a) Yes.
- b) As Enbridge outlines in its Proposed DSM Framework, the OEB has defined a number of objectives in the public interest that can be promoted through Enbridge’s effective management of its DSM portfolio. These include providing cost effective investments that help customers in making their homes and businesses more efficient in order to help better manage their energy bills; helping lower overall average annual natural gas usage; playing a role in meeting Ontario’s greenhouse gas reductions goals; and creating opportunities to defer and/or avoid future natural gas infrastructure projects. Defining and executing a well designed performance incentive mechanism will help ensure that Enbridge effectively manages the DSM portfolio.
Performance incentives have become best practice in terms of effective DSM portfolio management. Optimal Energy outlined in its report 13 jurisdictions that apply performance incentive mechanisms with objectives and structures that are similar to those included in the compromise proposal. In addition, all of the “leading gas utilities” identified by Energy Futures Group in Section 5 of its report incorporate similar performance incentive mechanisms.
The compromise proposal combines elements proposed by Enbridge, OEB Staff’s witness Optimal Energy, and Energy Futures Group. All of these proposals attempted to balance and align customer and shareholder goals and risks. The compromise proposal also accomplishes this objective.

Exhibit I.8.EGI.STAFF.14

Reference: EGI Reply Evidence, p. 46

Preamble:

The report notes: “As EFG points out, Enbridge's proposed incentive mechanism allows it to shift resources from costly programs and measures to cheaper options, although the important safeguards I outline in Section 2.1.6 limits this flexibility. These resource shifts, if executed thoughtfully, generate higher savings without increasing portfolio budgets. If Enbridge can deliver higher savings within available budgets, it will generate more net benefits from both the TRC-Plus and PAC-Plus perspectives. Thus, the performance mechanism, through the Resource Acquisition scorecards, already provide Enbridge a profit incentive to improve cost-effectiveness. In my view, a Net Benefit component adds complexity without substantially improving management incentives.”

Questions:

- a) In First Tracks' view, does the ability to shift resources among different programs provide an effective incentive to increase cost efficiency if Enbridge is on track to achieve the maximum performance incentive goals?
- b) Does First Tracks agree that net benefits are highly correlated with annual and/or lifetime savings?
 - i. If yes, does First Tracks agree that any net benefits metric will still provide at least the same incentive to maximize annual and/or lifetime savings? Why or why not?
 - ii. Does First Tracks agree that the effective difference between a net benefits metric vs. an annual and/or lifetime savings metric is simply to add an additional incentive to be cost efficient in addition to the inherent incentive to maximize savings?
- c) Please explain in detail how a net benefits component adds complexity if based on a PAC test, where all inputs other than savings are deemed and held constant based on the original plan numbers and the same cost-effectiveness calculation tool was used?
 - i. Please also explain if any complexity would be eliminated if the only energy avoided cost benefits counted in the PAC were gas benefits?

Response:

- a) Yes, especially compared to an alternative performance metric structured around net benefits. Any added costs from a performance incentive would be roughly equal between a structure based on savings and a structure based on net benefits.
- b) Yes. As I stated on page 52 of my report, both annual and lifecycle savings “correlate well with long-term objectives like GHG reductions and net benefits.”

- i Incentives structured around net benefits versus incentives structured around savings both create incentives to increase savings relative to the available budget, and therefore increase cost effectiveness. Whether the net benefits approach is “at least the same” will depend on the specific structure of the proposed mechanism.
 - ii No. As I discuss on page 46 of my report, and as EFG discusses on pages 27-30 of their report, net benefits metrics require the estimation, tracking, and performance risk management of many more inputs driving performance rewards. This complexity, and the costs and contention that come along with it, is a drawback to net benefits metrics.
- c) I’m not sure I fully understand exactly this hypothetical performance incentive would be structured, but I think the example describes a performance metric whose only variable is lifecycle savings. This is, by definition, more complex than a straight savings performance metric. That is, assuming the relationship between performance and incentive payments are structured comparably, there would be the same relationship between savings and incentive payments. If that is the case, it would be much simpler—and equally effective—to simply structure the performance incentive relative to savings.
- i. Because it requires moderately fewer inputs, it would be moderately less complex. But it is still much more complex than a straight savings structure.

Exhibit I.8.EGI.STAFF.15

Reference: EGI Reply Evidence, p. 48

Preamble:

The report notes: “For these reasons, I do not incorporate the Energy Intensity component in my compromise proposal. I also note that EFG’s proposed performance targets of 5% reductions in energy intensity, would require Enbridge to reduce systemwide gas sales by 5%, or approximately 1.25% savings per year. **These savings far exceed Enbridge’s proposed savings targets, which is constrained by the OEB’s historic limits on rate increases.** If the OEB does adopt an Energy Intensity component, I recommend that performance targets can be reasonably achieved within the budget resources available to Enbridge.” (emphasis added)

Question:

Please discuss the basis for the underlined statement above. In the response, please discuss the review and analysis that was conducted of Enbridge’s historic DSM budget amounts, performance towards its scorecard targets and ultimate DSMSI earnings.

Response:

In Figure 3 of its report, EFG characterizes Enbridge's portfolio as saving between 0.4% and 0.45% of sales between 2023 and 2027. This is far below the level required to achieve 5% savings across the service territory by 2027. To reach this conclusion, I did not review or analyze Enbridge's historic DSM budget amounts, performance toward scorecard targets, or ultimate DSMSI earnings.

Exhibit I.8.EGI.STAFF.16

Reference: EGI Reply Evidence, p. 50

Preamble:

The report discusses Enbridge's proposed change from net lifetime savings to net annual savings. As part of the discussion, the report notes "I agree with both Optimal and EFG that the most important objectives achieved by Enbridge's portfolio align better with lifecycle savings than they do with annual savings". The discussion continues to review this topic and provides a breakdown of the current measures in Enbridge's portfolio, showing no measures below 10 years and almost 70% of the proposed savings from measures with lives between 18-22 years.

Questions:

- a) Please confirm First Tracks' understanding that Enbridge's proposal to shift its natural gas savings metric from lifetime savings to annual savings is a divergence from current practice, and if so, does First Tracks still recommend this change in approach given all of the detailed measure life information the OEB has developed for [prescriptive](#) and [custom](#) programs.

Response:

- a) Confirmed that Enbridge's proposal is a divergence from current practice. Yes, I still recommend this change. Please see response to Exhibit I.8.EGI.STAFF.17.

Exhibit I.8.EGI.STAFF.17

Reference: EGI Reply Evidence, p. 52

Preamble:

The report notes: "Finally, I note that other jurisdictions have developed policies that effectively reduce controversy and evaluation risks associated with lifecycle savings

calculations. These include using Technical Reference Manuals to clearly define measure lives and baseline adjustment rules; applying changes to lifecycle calculations only prospectively; limiting changes within plan cycles; and defining savings goals that automatically adjust within plan cycles when measure lives or baseline adjustments change. I recommend that Ontario adopt similar policies. If appropriate policies were adopted, then I could support using lifecycle savings as the performance metric for the Resource Acquisition scorecards.”

Questions:

- a) Please discuss if First Tracks is familiar with the [OEB’s evaluation process](#) that has been in place since the 2015 program year. This process includes an [annual verification](#) exercise, [annual TRM update](#) process (the TRM includes measure lives for prescriptive measures among other things and solicits proposed updates and input from Enbridge and non-utility expert stakeholders that form an Evaluation Advisory Committee), often includes a detailed review of [custom projects](#), periodic review of NTG values from custom programs, and other studies as required including a [custom program measure life review](#) (with changes to custom measures lives applied prospectively). In the response, please discuss any improvements the OEB should consider to the current approach to update the TRM and measure life values for prescriptive and custom measures relative to the recommendation above.
- b) Please discuss if instead of changing from lifetime savings goals to annual savings, an alternative course could be to conduct an updated detailed measure life study of certain measures in question in order to increase the accuracy of measure life estimates.
- c) With respect to limiting changes within a plan cycle, please confirm that there are a lot of changes that happen outside of evaluation (e.g., changes to appliance standards, new technologies mature, energy avoided costs change which changes cost-effectiveness changes, etc.).
- d) Please discuss the potential impact of including direction of limiting or making no changes within the proposed plan cycle of 5-years relative to trends and pace of change in the energy industry and particularly the natural gas sector.

Response:

- a) I am generally familiar with these policies. Completing a full review and recommendations concerning the OEB’s current policies and procedures is beyond the scope of my evidence in this proceeding. However, I generally recommend that the OEB adopt policies that ensure that the equipment life and dual baseline calculations Enbridge uses to establish goals be the same assumptions and calculations used to measure performance against those goals.

b) Enbridge Gas response:

As described in the Company's Application, Enbridge Gas has proposed a change from lifetime savings to annual savings goals. This decision was based on several reasons, which were addressed previously in detail in Enbridge Gas's interrogatory responses to Exhibit I.9.EGI.STAFF.20, some of which include simplicity, consistent utility and customer understanding, and better potential for streamlined collaboration. Reducing evaluation risk related to measure life is a desirable goal for the utility but was not the primary rationale for proposing metrics based primarily on annual (first year) gas savings.

In this interrogatory, OEB Staff has suggested that conducting an updated detailed measure life study could be an alternative course to changing from lifetime savings to annual savings goals. Given, the Company's rationale for proposing annual (first year) savings metrics, an updated detailed measure life study does not therefore provide for "an alternative course". It is worth noting however that doing so would not necessarily increase the accuracy of measure life estimates. As First Tracks states in its report at page 51, "the data supporting equipment lives are poorly documented and rarely developed through actual measurements."

In addressing the topic of evaluation risk, it should also be clarified that despite efforts to standardize the application of input assumptions (as outlined in the DSM Framework proposal in Exhibit C, Tab 1, Schedule 1, Section 9, Input Assumption and Adjustment Factors, and the DSM Application in Exhibit E, Tab 5, Schedule 1, DSM Plan Inputs), and notwithstanding the current measure life guidance included in the TRM for prescriptive measures and standard custom projects, there remain scenarios in which measure life adjustments are an evaluation risk. Primarily, these include the following:

- For custom projects, when an Effective Useful Life (EUL) is not defined in the Custom EUL Guideline
- For adjustments made to Remaining Useful Life (RUL) through evaluation

In the event that an updated detailed measure life study is conducted as OEB Staff suggests, there would still be evaluation risk for results under the two scenarios listed above. These scenarios pose an unwanted risk for the utility and can be removed through the implementation of annual savings goals.

- c) There are many changes that happen outside of evaluation within plan cycles. I support policies that decouple utility performance measurement from changes that are largely outside of utility control. In this way, utilities are not penalized from changes that increase savings targets, nor rewarded from changes that decrease savings targets.
- d) I identified limiting or making no changes within the plan cycle as one of a range of options implemented in other jurisdictions to address evaluation risks. Regarding

this one approach, limiting changes to key evaluation inputs within plan cycles effectively decouples utility performance measurement from evaluation changes, but it also results in utilities tracking and report savings that reflect old assumptions. For this reason, some jurisdictions instead employ adjustable savings goals rather than fixed evaluation inputs. With this approach, utilities can report more accurate and realistic estimates of savings, while still decoupling performance measurements from evaluation changes.

Exhibit I.8.EGI.STAFF.18

Reference: EGI Reply Evidence, p. 52, Section 3.4.4.2

Preamble:

The report discusses participation vs savings metrics for multi-year scorecards, primarily related to market transformation programs.

Question:

Please confirm that First Tracks did not undertake a review of the market transformation program on its merits. If a review of the program was undertaken, please provide the analysis and conclusions.

Response:

I did not undertake a review of the market transformation programs on their merits.

Exhibit I.8.EGI.STAFF.19

Reference: EGI Reply Evidence, p. 53

Preamble:

The report notes: “In other jurisdictions, utilities have broad flexibility to shift funds among offerings to increase portfolio performance and thereby maximize incentives.”

Questions:

- a) Please define more precisely what is meant by “broad flexibility”.
- b) Please provide a list of utilities that, to First Tracks knowledge, have flexibility to move program funds from scorecard/program (e.g., sector to sector), beyond the 30% provision currently included in the OEB’s DSM Framework.

Response:

a) This statement was made in the context of comparing other utility performance incentive mechanisms that measure performance at the portfolio level to Enbridge's proposed mechanism that measures performance at the program level. These other utilities have more flexibility than Enbridge will have to increase their performance payments when they shift funds.

b) I have not performed this analysis.

Exhibit I.8.EGI.STAFF.20

Reference: EGI Reply Evidence, p. 53

Preamble:

The report discusses performance thresholds and concludes that maintaining Enbridge's proposed bands that allow it to start earning a performance incentive at 50% of target up to 150% is reasonable due to Enbridge facing "substantially more restrictions on its flexibility to move funds among offerings and rate classes" compared to other jurisdictions. Further, the report notes that this is reasonable due to the report's compromise proposal giving up components that provided a hedge against individual program performance.

Questions:

- a) Please discuss and provide references to research and analysis of other jurisdictions that have a greater ability to shift funds among offerings and rate classes.
- b) Please confirm your understanding that this proposal is a divergence from current practice, where Enbridge only begins to earn a performance incentive once 75% of a target is achieved.
- c) Please provide and explain any analysis that was conducted that reviewed Enbridge's performance since 2015 relative to the performance thresholds.

Response:

a) Please see response to Exhibit I.8.EGI.STAFF.19 Part a.

b) Confirmed.

c) I have not performed this analysis.

Exhibit I.8.EGI.STAFF.21

Reference: EGI Reply Evidence, p. 54

Preamble:

The report supports the continued use of the target adjustment mechanism and notes: “Optimal recommends eliminating the TAM and instead defining fixed performance targets that would no longer adjust annually through the TAM (but could be adjusted during the one-time Mid-Point Assessment).

I cannot support this change. The TAM allows Enbridge to evolve the portfolio in reaction to real-world changes in program markets and in the general economy. The TAM adjusts savings targets to reflect underlying changes to key evaluation parameters and inflation, which both affect the cubic meters of savings that Enbridge can reasonably save with available budgets. If the OEB were to set fixed targets today, based on Enbridge’s current evaluation inputs and expectations for inflation, Enbridge would be accountable for changes to those assumptions, even though they are largely out of its direct management control. For example, a lower net-to-gross (NTG) assumption will make it harder for Enbridge to meet savings targets with available budgets, and penalize Enbridge through the incentive mechanism. It also is important to remember that the TAM cut both ways; if NTG rises, Enbridge receives a windfall when it can create higher savings with its available budgets.

While NTG and other evaluation changes are not entirely out of utility management control, in my experience, evaluation results often reflect random changes to evaluation methods and assumptions, or noise in evaluation data collection, rather than real changes in underlying market conditions or utility performance. I have seen many evaluations where NTG levels change, even though utility program designs do not change, and the evaluator offers no program design recommendations for improving NTG. Savings from low-volume, high savings programs like the Industrial and Large Volume programs are especially susceptible to NTG and other evaluation changes.”

Questions:

- a) Please confirm that if the TAM structure continues that in the event Enbridge underperforms in one year of its plan cycle, all subsequent targets will be reduced while available budget remains constant.
- b) Please discuss the level of risk to ratepayers and general impact of ratepayer funding of continuing with the TAM as opposed to incorporating fixed natural gas savings targets.
- c) In contrast to (b) above, please discuss the level of risk to Enbridge (and its shareholders) of a potentially smaller annual shareholder incentive if fixed targets were approved, considering that all program and admin costs are fully recovered.
- d) Please discuss if First Tracks considered alternative improvements to the structure of the TAM (including minimum levels of achievement/natural gas savings floors that

future targets could not fall below; TAM with set floors equal to prior year savings levels multiplied by a minimum annual escalator; etc.).

- e) Please discuss First Tracks' familiarity with the OEB's evaluation process which includes, amongst other things: NTG studies conducted in relation to the [2015](#) and [2018](#) custom C&I and Large Volume programs; a study of [2017](#) prescriptive C&I programs; annual recommendations from the OEB's Evaluation Contractor to Enbridge on how it can improve its programs and evaluated results ([2020 Annual Verification Report, p. 30](#)). In your response, and based on your review of these evaluation studies, please discuss if the above conclusions remain unchanged about Enbridge's level of insight and control over NTG values and other key inputs.
- f) Please confirm First Tracks understanding that program design and customer enrolment of Enbridge's custom C&I programs is entirely within its control, including the ability to screen prospective participants to ensure they are good candidates for the program and not free riders.

Response:

- a) I agree that if the TAM structure continues, savings declines in one year *may* result in lower savings in the following year. However, there are situations where this is not true. For example:
- The TAM structure includes a productivity adjustment, so the savings goal will increase if the historic decline was less than the required productivity increase.
 - The TAM structure adjusts for changes to both savings and spending. So the savings goal will increase if the decline in program spending is larger than the decline in program savings.
 - Because savings may increase in the second year (especially given the budget allocation available), it is not true that savings targets would decrease in all future years.

The TAM mechanism is also symmetrical, so that savings *increases* in one year, will often result in increased savings in future years. Since the productivity adjustment is only in one direction (always increasing savings), it will compound, rather than offset these increases.

- b) With a TAM structure, Enbridge is held accountable for management decisions largely within its control, such as delivering participation levels envisioned in the approved plan and adjusting funding for different offerings to improve portfolio performance. Goals adjust for changes largely outside of Enbridge's control, such as changes in how savings are calculated (e.g., gross savings calculations in the TRM; NTG assumptions; equipment lives if the performance metric is lifecycle savings; etc.) and inflation. If these changes result in higher savings per participant or lower cost per participant, relative to the assumptions Enbridge used to calculate savings targets, then Enbridge will be accountable for delivering higher savings. If these changes results in lower savings per participation and higher costs per participant, then Enbridge will be accountable for delivering lower savings.

With fixed annual savings metrics, Enbridge becomes responsible for these risks outside of its control. As I discuss in Exhibit I.5.EGI.ED.2, a key objective of performance incentive mechanisms is to make DSM the preferred investment opportunity and management priority of utility managers. Introducing additional risks into the performance measurement process will reverse this goal, and instead give the direction that DSM is a risky, unmanageable activity. In the end, this approach harms customers if the performance incentive mechanism—including the approach used to measure performance—does not incent the utility to maximize portfolio performance within available resources. Customers will receive less of the savings, net benefits, greenhouse gas reductions, and economic development that DSM provides.

- c) If the performance incentive mechanism—including the approach used to measure performance—does not incent the utility to maximize portfolio performance within available resources, shareholder incentives will be lower and shareholder and customer incentives and risks will be less aligned. This is not consistent with the goals of performance incentive regulation.
- d) Redesigning the TAM was outside the scope of my engagement with Enbridge. My comments were in response to Optimal's recommendation #3, which recommended eliminating the TAM. For the reasons I outline in response to part b), I believe that the TAM is a better approach than fixed savings goals. Most of the utilities identified by Optimal Energy in its survey of performance incentive mechanisms, as well as the "leading gas utilities" identified by Energy Futures Group in Section 5 of its report employ some sort of goal adjustment process, instead of the fixed annual goals proposed by Optimal Energy.
- e) I am generally familiar with the OEB's evaluation process, although I have not read all of the citations identified in the question. My opinion remains unchanged that changes in NTG often reflect poor evaluation methods, random noise in underlying data, limits on portfolio budgets, and other factors outside of utility control.
- f) I am generally familiar with Enbridge's C&I program designs, although not with detailed implementation strategies and execution.

Exhibit I.8.EGI.STAFF.22

Reference: EGI Reply Evidence, p. 54

Preamble:

The report notes that "many other jurisdictions apply policies similar to the TAM to dampen effects of evaluation changes on utility performance metrics."

Questions:

- a) Please provide a list of all other jurisdictions that, to First Tracks' knowledge, use a TAM or similar mechanism or policy in place, a description of the policy, and a reference and/or link to the source documentation fully describing all details of the policy/mechanism.
- b) Which of these jurisdictions specifically use the cost to achieve from a previous program year to modify previously approved targets for a future program year within the same plan cycle (as opposed to, for example, updating targets via updating NTG values or other explicit EM&V findings, in the original planning model).

Response:

- a) I have not performed a comprehensive review of goal adjustment policies in other states, but I am aware of these references:
 - Enbridge provided two reports surveying NTG policies in other jurisdictions in EB-2021-0002, Exhibit E, Tab 4, Schedule 5, Attachments 1 and 2.
 - The 2017 report *Net-to-Gross Policies: Cross-Cutting Jurisdictional Review*, prepared for Enbridge by Navigant Consulting, Inc. surveys NTG policies in other jurisdictions.
 - ACEEE tracks TRM, NTG, and other evaluation policies in U.S. States. (<https://database.aceee.org/state/evaluation-measurement-verification>)
 - ACEEE has developed reports surveying evaluation policies in U.S. jurisdictions:
 - <https://www.aceee.org/sites/default/files/publications/researchreports/u122.pdf>
 - <http://aceee.org/research-report/u1401>
- b) I know of no other jurisdictions that adjust costs as well as savings inputs.

Exhibit I.8.EGI.STAFF.23

Reference: EGI Reply Evidence, p. 55

Preamble:

The report notes “Ontario’s TAM has been in place for many years and, although I’m sure its processes could be improved, it has a successful track record.”

Questions:

- a) Please discuss what analysis was conducted to reach the conclusion that the TAM “has a successful track record”.
- b) On what basis is First Tracks determining the TAM has been successful?

- c) Please discuss the extent of First Tracks' review of the TAM, Enbridge's targets since 2015 and actual performance, and if any suggestions can be made on improvements that could be implemented.
- d) If the OEB were seeking to ensure continuous improvement and improved efficiency in programming from Enbridge's DSM plan in order to deliver value to ratepayers and the province in general, would First Tracks still recommend the OEB approve the TAM as proposed?

Response:

- a) It is my understanding that the OEB has approved procedures similar to those included in the TAM since 2012. It is also my understanding that the TAM is the OEB's preferred policy for setting appropriate goals in an environment of uncertainty across a 5- to 6-year plan cycle, since this is the policy that the OEB crafted for both Enbridge Gas and Union Gas for the 2015-2020 plan cycle.
- b) See response to part a).
- c) A full review of the TAM mechanism and recommendations for improvement are beyond the scope of my evidence in this proceeding.
- d) A full review of the TAM mechanism and recommendations for improvement are beyond the scope of my evidence in this proceeding.

Exhibit I.8.EGI.STAFF.24

Reference: EGI Reply Evidence, p. 56

Preamble:

The report recommends that the OEB accept Optimal's recommendation of Enbridge being able to manage a 5-year budget, while also continuing the 15% DSMVA annual overspend policy as a "best of both worlds" option.

Questions:

- a) Please confirm that this recommendation is not consistent with Optimal's recommendation as it does not also include a 5-year target component.
- b) Please provide greater clarity on this recommendation. In the response, please discuss the mechanics of this approach – for example, if this recommendation is accepted by the OEB, will Enbridge have full access to the entirety of its 5-year budget on January 1, 2023 and the ability to spend as much or as little in any year of the new plan term? Additionally, on what basis would the 15% DSMVA overspend provision be applicable – for example, would this be based on an annual budget

milestone or on the overall 5-year budget amount? Further, since the TAM is based on annual budgets, how would this recommendation reconcile with that formula?

- c) Please discuss the basis and rationale for not also supporting the 5-year target component of Optimal's recommendation.

Response:

- a) Not confirmed. As I stated on page 56 of my report: "Regarding 5-year performance targets, since Optimal recommends any 5-year goals be translated into annual targets, I don't think this recommendation has much bearing on the current proceeding."
- b) I was responding to the proposal from OEB Staff's evidence provided by Optimal Energy, who did not describe how the 5-year budget management process would relate to the 15% DSMVA overspend provision. I would be interested in Optimal Energy's perspective on these questions related to their original proposal and to my combined proposal.

I think features of the proposal would include:

- Consistent with Optimal Energy's recommendation, setting annual performance targets.
- Establishing initial annual budgets for the portfolio and individual programs as part of the Plan filing and approval.
- Enbridge would have access to the entirety of its 5-year budget on January 1, 2023. In my experience with gas utilities managing under this framework in Illinois, while the utilities have access to the entire budget, the need to manage the budget for the entire portfolio horizon places a natural limit on overspending too early. However, it allows utilities who underspend in one year (e.g., due to issues such as a pandemic or a large customer project shifting from December to January) to make up that funding in future years.
- Updating annual budgets targets and savings targets through the TAM process.
- Allowing Enbridge to exceed the 15% budget cap in individual years if there is sufficient budget available from its 5-year portfolio management.
- Providing Enbridge with an overall 15% budget allowance across the 5-year portfolio.
- There may be other features required to execute this proposal.

- c) See response to part a).

Issue 9 – Scorecards, Metrics and Targets

Exhibit I.9.EGI.STAFF.25

Reference: EGI Reply Evidence, p. 59

Preamble:

The report cautions the use of EFG's savings benchmarks due to different regulatory environments, market conditions, and resources available to them.

Questions:

- a) Has First Tracks reviewed Enbridge's proposed savings targets and past performance?
- b) If yes, please comment on the overall level of natural gas savings relative to budget and the proposed trajectory throughout the plan term relative to other leading natural gas efficiency program administrators.

Response:

- a) I have not conducted an in depth review of Enbridge's proposed savings targets or past performance relative to other leading natural gas energy efficiency program administrators. My evidence in Section 4 of my report is limited to recommending that the OEB use caution in applying benchmarks provided by Energy Futures Group in setting performance targets for Enbridge, since these other jurisdictions have very different regulatory environments, market conditions, and resources available to them. Also see my response to Exhibit I.3.EGI.GEC.19 and Exhibit I.3.EGI.GEC.20.
- b) See response to part a).

Issue 10 – Suite of Programs

Exhibit I.10.EGI.STAFF.26

Reference: EGI Reply Evidence, p. 58

Preamble:

The report rejects a number of recommendations from Optimal and EFG without providing rationale in section 3.5.2: Recommendations Excluded from the Compromise Proposal.

Question:

Please provide rationale for each Optimal and EFG recommendation that First Tracks suggests the OEB reject, clearly explaining any analysis done in coming to the conclusion that the particular recommended should be rejected.

Response:

Rationales for each of the recommendations provided in Section 3.5.2 of my report were provided in Section 3.4. of my report.