

19 January 2022

Nancy Marconi, Registrar
Ontario Energy Board

VIA RESS AND EMAIL

Dear Ms Marconi:

Re: EB-2021-0002 – EGI 2022-2027 DSM – GEC/ED IRRs to EGI Interrogatories

Please find interrogatory responses filed by GEC-ED in response to IRs from Enbridge on the evidence of Energy Futures Group.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Poch', with a stylized flourish at the end.

Cc: All parties

GEC/ED Responses of Energy Futures Group to EGI Interrogatories

6-EGI-1-GEC-ED.1

Reference:

Exhibit L.GEC.ED.1, page 5

Preamble:

Enbridge's proposed plan will produce less savings than even the most constrained scenario analyzed in the 2019 Achievable Potential Study – despite spending twice as much as the study's assumed budget constraint.

Question:

It was stated in the 2019 Integrated Ontario Electricity and Natural Gas Achievable Potential Study, p. 116 that budgets were created without taking into account program design and delivery considerations, as well as without an assessment of free ridership. Additionally, portfolio overheads were not taken into consideration.

It was further stated that "When proposing a budget for a future DSM or CDM portfolio or program based on the potential scenarios included in this potential study, a program delivery agent should consider incremental program costs to account for future program net-to-gross (NTG) ratios and fixed portfolio overhead costs with supporting rationale and evidence."

- a) Does the Energy Futures Group ("EFG") agree that the above statements are accurate and if so, does EFG agree that a direct comparison drawn between the Enbridge Gas DSM Plan and the 2019 APS should be qualified by these considerations as they impact the reliability of the comparison. If not, why not. Explain in detail.
- b) The approximate weighted average net to gross ratio is 0.5 used in Enbridge Gas's forecast, using this net to gross value and using \$18,360,000 for the Portfolio Overhead, provide the calculations for an adjusted budget as per the 2019 APS study instructions, stating all assumptions.

Response:

- a) See response to 6.OEB Staff.1.GEC/ED.1
- b) EFG disagrees with the question's premise that Enbridge's 0.5 average net-to-gross (NTG) ratio is the appropriate ratio to use to compare the Company's spending levels to the potential study. NTG ratios are a function of program and portfolio design. One could construct multiple DSM program portfolios achieving similar levels of savings but with different NTG ratios and therefore with different budget levels. EFG also disagrees with the premise that an \$18.4 million portfolio budget is necessary or appropriate.

6-EGI-2-GEC-ED.1

Reference:

Exhibit L.GEC.ED.1, page 9

Preamble:

"Enbridge has proposed to spend \$142.3 million on its DSM programs in 2023, increasing to \$170.5 million in 2027. As Figure 2 shows, in inflation-adjusted terms, the 2023 spending level is actually lower than the Company's actual DSM spend in 2018 and 2019. The Company's planned spend does not reach the 2019 levels until 2026. The 2027 value is about 4% higher than 2019."

Question:

- a) Please confirm, EFG is both aware of the nature of the DSMVA and the allowance to spend 15% more than budget within certain conditions.
- b) Please confirm, EFG is aware that the 2018 and 2019 figures being compared to include utilization of the budget overspend provisions.
- c) Please confirm that the appropriate comparison to the 2018 and 2019 actual DSM spend, would be to use the proposed budget (ex. \$142.3M in 2023) plus a 15% allowance for overspend.

Response:

- a) Confirmed.
- b) It is our understanding that Enbridge and Union both spent more than their planned budget in 2019, with the total over-spend being \$7.2 million or about 5%.

It is also our understanding that Union spent more than its planned budget, but that Enbridge spent less than its planned budget in 2018. The combined spending was approximately \$4.4 million or about 3% over combined planned spending levels.

Note that Enbridge's proposed 2023 budget is also lower, in inflation-adjusted terms (\$136.8 million in 2021 dollars), than approved budgets for both 2018 (\$140.5 in 2021 dollars) and 2019 (\$138.2 million in 2021 dollars).

- c) Not confirmed. For the purpose of assessing the extent to which Enbridge's DSM plan effectively addresses policy guidance and customer needs and opportunities, planned or budgeted spending and savings is the most appropriate focus. The 15% overspend allowance should not be included in comparisons to previous years because it may not be used at all; even if it is used,

it may not be used in full (as the response to “b” above clearly illustrates). By definition, the Company’s planned budget should reflect its best estimate of what will get spent. Moreover, based on both historic and Enbridge’s proposed gas DSM framework rules, the Company would not be able to access the 15% overspend allowance unless it has achieved its scorecard targets.¹ In other words, if the programs had performed only very slightly below expectations (e.g., a scorecard score of 99%), additional spending would not be allowed – even if the programs were still very cost-effective and additional spending could yield substantial additional cost-effective savings.

¹ Exh C, Tab 1, Sch. 1, p. 51

6-EGI-3-GEC-ED.1

Reference:

Exhibit L.GEC.ED.1, page 14

Preamble:

It should be noted that the Achievable Potential Study concluded that natural gas savings of 14% could be cost-effectively achieved from DSM programs over the 12-year period from 2019 through 2030.

Question:

- a) Please confirm or correct footnote 20, as it appears to reference a different report.
- b) Please confirm the 2019 APS data that shows the cost to achieve 14% natural gas savings is approximately \$7 Billion. Reference OEB's 2019 Achievable Potential Study, Tab 09a.

In following an approach to gross up budgets as mentioned in a previous question the APS suggests that "When proposing a budget for a future DSM or CDM portfolio or program based on the potential scenarios included in this potential study, a program delivery agent should consider incremental program costs to account for future program net-to-gross (NTG) ratios and fixed portfolio overhead costs with supporting rationale and evidence."

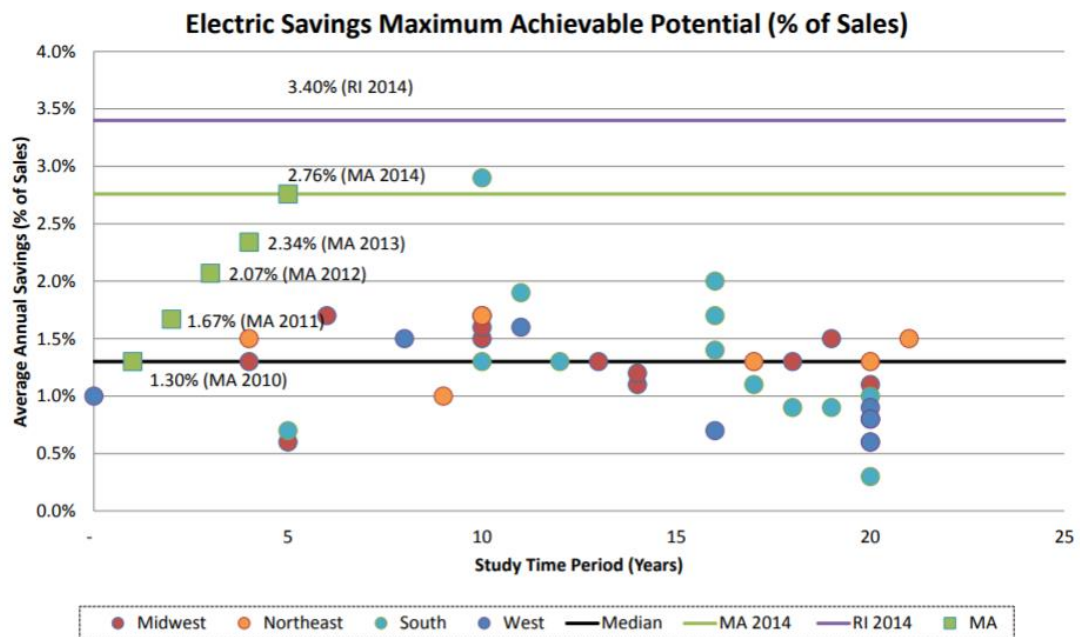
- c) Following these instructions, please provide a total program cost for the 14% natural gas savings.
- d) Please list all assumptions being made, with reference to the 2019 APS and provide all calculations.

Response:

- a) Footnote 20 of the EFG report is incorrect. The correct reference is the same as in footnote 18 of our report (Navigant, 2019 Integrated Ontario Electricity and Natural Gas Achievable Potential Study, prepared for the IESO and Ontario Energy Board, updated 2019-12-10), except that it is page ix. The ACEEE report in footnote 20 is instead the reference for the quote in footnote 21.
- b) The study's total estimated cost for the maximum achievable potential scenario for natural gas – which assumes financial incentives equal to 100% of the cost of efficiency measures – is approximately \$7 billion for the twelve years from 2019 through 2030. That is an annual average budget of about \$580 million. However, efficiency potential studies are inherently very conservative. The EFG report referenced an ACEEE review of potential studies as an example of other experts holding this view. Another potentially useful reference is a presentation by

Phil Mosenthal, a Principal of Optimal Energy and co-author of the report filed in this proceeding on Staff's behalf, at the 2015 ACEEE Efficiency as a Resource Conference in Little Rock Arkansas.² Copied below is the graph from the slide 3 of his presentation. The orange dots show what electric efficiency potential studies in the northeastern U.S. states said was maximum achievable potential. The average (the black line) was 1.3% per year; the most optimistic was 1.8% per year. In contrast, once the states of Massachusetts and Rhode Island committed to pursuing all cost-effective efficiency potential, actual savings ramped up to 2.76% and 3.40% - or two to three times what the average study suggested was maximum potential and 50% to 90% more than what the most optimistic study suggested was possible.

Is This Really "Maximum Achievable"?



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The corollary to the reality that efficiency potential studies under-estimate maximum achievable efficiency potential is that they overstate the costs of achieving the level of savings

² Mosenthal, Philip, "Do Potential Studies Accurately Forecast What is Possible in the Future? Are we Mislabeling and Misusing them?", presented at the ACEEE Efficiency as a Resource Conference, Little Rock, Arkansas, September 21, 2015 (https://www.aceee.org/sites/default/files/pdf/conferences/eer/2015/Philip_Mosenthal_Session2D_EER15_9.21.15.pdf).

that they suggest is the maximum achievable. For example, if the maximum achievable level of gas savings with 100% incremental cost incentives was 1.8% annual savings instead of 1.2%, one should be able to achieve 1.2% with less than 100% incremental cost incentives.

- c) Estimating a total program cost in the manner suggested would require development of net-to-gross (NTG) ratios for each of the key markets for which efficiency potential was analyzed. EFG has not developed such net-to-gross estimates. While we would expect NTG ratios to be quite high for most measures and markets in a scenario in which 100% of measure costs were being paid, they would still likely vary somewhat. Attempting to estimate NTG ratios for each relevant market and sub-market, and then ensuring they were properly applied to each measure included in the potential study, would be a substantial undertaking and is beyond a reasonable expectation for an interrogatory response.
- d) See response to “c” above.

8-EGI-4-GEC.ED.1

Reference:

Exhibit L.GEC.ED.1, page 30

Preamble:

Enbridge's proposed shared savings mechanism should be scrapped with shareholder incentive dollars allocated instead to savings metrics.

Question:

With reference to EFG's commentary in this report suggesting Enbridge Gas's proposed shared saving mechanism should be "scrapped":

- a) Please confirm that the introduction of a wholly similar Shared Savings Mechanism was specifically proposed by Mr. Neme in September 2018 and illustrated in a presentation provided to OEB Staff and interested parties as part of the Mid-Term Review. A copy of the relevant slides from this presentation was included at Enbridge Gas' IRR, Exhibit I.8.EGI.STAFF.18, Attachment 1.
- b) Please confirm that Joint Comments of Environmental Defence and the Green Energy Coalition Re Phase I of the Post-2020 DSM Framework Consultation submitted to the OEB on June 27, 2019 included the following (reflecting similar comments from a number of stakeholders): "Shareholder incentives should align consumer and utility interest and encourage maximizing total net benefits for consumers" (page 4).
- c) Please clarify why Mr. Neme representing GEC/ED has repeatedly previously advocated for the adoption of a Net Benefits, proposing that all or a portion of shareholders incentives be paid as a growing percent of net benefits, however in the expert evidence submitted here Mr. Neme is now opposing the inclusion of a net benefits based incentive.

Response:

- a) Not confirmed. The presentation referenced by Enbridge discussed the problem of historic approaches to shareholder incentives rewarding utilities for filing plans that had modest goals so that the goals could then be more easily achieved or exceeded in order to enable earning of shareholder incentives. As slide 20 of the presentation summarized: "utilities are incentivized to *execute* DSM plans well, but not to *design and develop* optimal DSM plans." (emphasis in original) The following slide (#21) endeavored to offer a couple of options for addressing this problem, one of which was to tie the maximum incentive to an increase in Utility Cost Test (UCT) net benefits and the second of which was to pay incentives as a percent of net benefits. Because the focus of these slides was on incenting Enbridge to propose more ambitious plans, either option would have to have been adopted and known before a DSM plan was filed in order for the purpose of the proposal

in our slides to have been effectively addressed. That has not happened in this proceeding. Instead, Enbridge proposed a sharing of net benefits as part of its plan filing – too late to actually influence plan design or ambition and enabling it to essentially set up the system to reward it for the level of savings it will plan to achieve. Moreover, Enbridge’s proposal is to assign a portion of the maximum incentive it could earn to the shared savings metric, rather than effectively tying the maximum incentive that can be earned to the magnitude of economic net benefits. In other words, our 2018 proposal was about incenting better plans whereas Enbridge’s shared savings proposal is about incenting performance relative to the plan it proposed.

Stated differently, EFG proposed two ways to tie the maximum incentive amount to the overall savings to be achieved by the DSM. Enbridge’s proposed shared savings mechanism does not do that. It simply allocated the incentive pot differently. It does not fix the fundamental problem wherein there is no incentive to propose DSM plans that maximize benefits to customers.

Note that though we did not present this idea in our 2018 presentation, a third option to incentivize Enbridge to propose more ambitious DSM plans would be to tie the maximum incentive to its savings levels relative to other North American gas utilities. For example, the maximum incentive could be tied to achieving incremental annual savings of at least 1.0% of sales – coupled with a sufficiently long average measure life. That maximum incentive could be greater than the current maximum incentive. The maximum incentive could then be reduced for lower levels of savings ambition. As explained in footnote 50 of the EFG report, Michigan has a similar structure today. It pays an incentive equal to the lesser of 20% of efficiency program spending and 30% of economic net benefits if gas utilities achieve 1.0% annual savings and an incentive equal to the lesser of 15% of program spending if gas utilities achieve 0.75% annual savings and 25% of economic net benefits. Utilities earn nothing for achieving less than 0.75% annual savings.

- b) The referenced comments did say “Shareholder incentives should align consumer and utility interest and encourage maximizing total net benefits for consumers.” However, this was simply a proposed rewriting of a statement of principle rather than a proposal for a specific shareholder incentive metric. In fact, the comments go on to make the point raised in our answer to part “a” above – that absent a framework in place in advance of utility plan filings which encourages greater DSM plan ambition in reducing customer bills, Enbridge simply has an incentive to propose performance metrics that reflect what it expects its proposed plan to achieve.
- c) As discussed in the responses to “a” and “b” above, the context for past proposals is very important. Enbridge has not provided additional examples of the cases in which Mr. Neme “has repeatedly previously advocated for the adoption of a Net Benefits, proposing that all or a portion of shareholders incentives be paid as a growing percent of net benefits.” Thus, we cannot either verify Enbridge’s interpretation of Mr. Neme’s past recommendations or reflect on the context in which Mr. Neme may have been made such recommendations.

That said, we should make clear that EFG believes it is possible to develop a useful shareholder incentive mechanism that is based on “sharing” of economic net benefits. We just think such a mechanism is both (1) highly overlapping and redundant with lifetime savings metrics (i.e., it does not make sense to have both); and (2) more complicated to design and manage. A related point is that it is much easier to “make mistakes” in the design of a shared savings mechanism, with unintended and undesirable outcomes, than with lifetime savings metrics. As noted in the EFG report, if a shared savings metric were to be preferred for the 2023 to 2027 plan cycle, such a

mechanism should (A) be based on UCT net benefits instead of TRC net benefits (the focus on UCT would both eliminate the need to assess often difficult to estimate measure costs while also focusing on the effectiveness of utility spending), (B) include a mechanism to avoid penalizing or rewarding Enbridge if avoided costs change, and (C) start paying incentives only at 75% of expected net benefits (so no rewards are paid for poor performance). In addition, rather than just one net benefits metric, there should be different metrics for several different customer groups – just as Enbridge has proposed different savings scorecards for different customer groups – to mitigate against incentives to shift funds from programs serving harder to reach customers with less cost-effective savings to easier to serve customers with more cost-effective savings.

10b-EGI-5-GEC.ED.1

Reference:

Exhibit L.GEC.ED.1, page 39-40

Preamble:

Limiting the level of new gas fired equipment in low-income housing will lower the likelihood that low-income households will be the ones footing a disproportionate share of future natural gas distribution bills as the energy industry addresses climate concerns through electrification.”

Question:

- a) Please confirm EFG recommends that financial incentives should not be made available to Low Income customers who choose to upgrade to higher efficient natural gas equipment that would result in an immediate cost savings?

Response:

See response to 2-LIEN-1GEC/ED.1.