EB-2021-0002

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sched. B, as amended (the **Act**);

AND IN THE MATTER OF an application by Enbridge Gas Inc. pursuant to Section 36(1) of the Act, for an order or orders approving its Demand Side Management Plan for 2023-2027

Energy Probe Submission

May 19, 2022

Energy Probe Submission: EGI 2023-2027 DSM Framework and Plan

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Enbridge Gas Inc. Demand Side Management Framework and Plan for 2023-2027.

Energy Probe Submission

i) Executive Summary

Energy Probe is primarily concerned with the design of, and budgets for, the residential Whole Home Program. The program is flawed in several ways, including incentives for furnace replacement, has a TRC of only 1.6 (apart from Smart Thermostats). Several incentives are too low and for insulation measures, are not normalized per square foot.

The most important requirement for customers, is to integrate the program with the Greener Homes Canada Program. This will require carrying the current program into 2023 with only an administrative costs increase and redesigning the program for launch in 2024.

Energy Probe's other concerns relate to shareholder incentives for Greenhouse Gas Emission reduction and adopting a fuel neutral approach to electrification and coordination with municipalities.

1.0 INTRODUCTION

Energy Probe's supporters are primarily residential customers in the Enbridge EGD and Union Rate zones. Energy Probe is also concerned with some overreaching policy issues such as affordability, the cost to non-participants and additional shareholder environmental premiums and incentives.

The Background, Context and DSM Framework affects all classes of customers and Energy Probe will address these under the appropriate issues.

Much of this submission will focus on the residential resource acquisition programs, primarily the proposed Whole Home Program 2023-2027.

2.0 BACKGROUND AND CONTEXT (ISSUE 1)

This Application has been informed by the Existing DSM Framework, the Mid-Term Review and Report[1], the DSM Letter[2] the experience of the Company undertaking the delivery of DSM programming in 2015-2021, and the annual DSM account clearance proceedings.

The DSM Letter reiterates the OEB view that

> "the primary objective of ratepayer-funded natural gas DSM is assisting customers in making their homes and businesses more efficient to help better manage their energy bills".

In working towards the primary objective, Enbridge Gas's future ratepayer-funded DSM plan should also consider the following secondary objectives:

- Help lower overall average annual natural gas usage
- Play a role in meeting Ontario's greenhouse gas reductions goals
- Create opportunities to defer and/or avoid future natural gas infrastructure projects.

Budget Trajectory

The DSM Letter states: "...the level of natural gas savings achieved through DSM programs for each dollar spent has been decreasing. This may be related to Enbridge Gas striving to meet a number of different priorities, programs beingextended to harder-to-reach customers, and recent updates to outdated assumptions." [3] and "The OEB expects Enbridge Gas to seek out elements ofcurrent programs that can be modified and

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[1] EB-2017-0127/-0128, Report of the Ontario Energy Board, Mid-Term Review of the Demand Side Management (DSM) Framework for Natural Gas Distributors (2015-2020), November 29, 2018 ("**Mid-Term Review**")

[2] OEB DSM Letter, December 1, 2020, p. 2.

[3] Ibid Pages 3-4

consider new programs in order to optimize overall program results to make the best use of ratepayer funding.
"Gradual increase" is the language from the Environmental Plan which EGI interpreted as the "modest budget increases" language in the OEB DSM Letter.

EGI indicated that in meetings with the Ministry, it presented several scenarios:

- Continue with a $2 per month residential rate impact ceiling.
- increasing the budget at 5% a year over 10 years which would increase the bill impact from $2 to $3 per month.
- budget increased by 10% per year, the bill impact doubling from $2 to $4 per month

The Company states it ultimately interpreted Government policy and the OEB DSM Letter for modest increases when setting the base budget for 2023 and formulaic budget increases thereafter.

On March 25, 2022, the Province issued a press release, including modelling for its 2030 emissions reduction target and the principles to align with the federal government targets for Ontario.

The Government used a conservative illustrative scenario, assuming a 10% real increase in DSM funding by 2030 (which amounts to a 1.2% real annual increase for the duration of the 2023-2030 period).

By comparison, the Company has proposed a $142 million DSM budget for 2023 and beginning in 2024, a formulaic increase equal to the inflation rate for administration and portfolio costs and the inflation rate plus a further 3% for program costs only including customer/participant incentive.

Comments on DSM Framework and Budgets

Energy Probe asks the question "When is there enough gas DSM"? This includes the important context of Ontario as part of expanded Federal Gas DSM programs.

There are several answers to this question:

- Modest budget increases from 2022-2027. (OEB letter)

- The Ontario Government projection for gas DSM Increasing at 1.2%/year 2022-2030.
- The EGI base 2023 $142 million budget and increases of inflation plus 3% for program costs, including customer/participant costs.
- the doubling of Budgets from 2022-2027 proposed by certain parties in this proceeding, including amortization of increased budgets over 5-10 years.

Energy Probe's submission is that existing 2022 DSM budgets are enough for Ontario Ratepayers to pay, particularly residential customers.

For many years, EP has noted the discrepancy between participant and non-participants.

The answers are always:

- all ratepayers can become participants and
- non-participants benefit from avoided costs and other collateral benefits.

In 2020 about 15,000 out of about 3 million residential customers (0.005%) benefited from participation in the EGI residential DSM Programs.

Energy Probe would not raise its historic equity concerns, if any of the proposals EGI has placed before the Board were reasonable and affordable.

However, the EGI proposals for the residential sector, are not reasonable and affordable, particularly when taking into account that in 2022, Ontario taxpayers are now paying for the new Federal Greener Homes and other conservation programs, as well as the increased Federal Carbon Tax.

Enbridge Gas Distribution Rate 1 customers will see a 14% increase in DSM costs in 2023[4].

[4] Exhibit F Tab1 Schedule 3 Page 1 line 1

The information to position the EGI DSM programs and the Federal Greener Homes (and other federal programs) is not available.

Until these data are available, the Board should reject all of the EGI Budget proposals, for the Residential Sector.

To maintain continuity for customers, the Residential Sector Budget for 2023 should be the 2022 budget adjusted at a Board-determined inflation factor for administrative costs only.

For 2024, EGI should provide an updated Residential Program and budget based on its projection of cost sharing and market reach together with the Federal Greener Homes Program.

As noted later our review and comments on the Whole Home Program, the Program is flawed in that it is not providing an appropriate TRC cost benefit ratio (1.61) (apart from smart thermostats).The whole program needs to be redesigned to mesh with the federal Greener Homes Program and to increase coordination with the IESO (recognizing at present there are no residential IESO programs).

Recommendation #1.

The Board reject the EGI Residential program budget proposals and freeze 2022 DSM budgets for the residential sector Whole Home Program and rollover the program into 2023 with only an inflationary increase in administrative budget.

Direct EGI to file an updated 2024 residential program that demonstrates improved TRC ratios and revised budget, fully integrated with the Federal Greener Homes Program.

3.0 CONSISTENCY WITH THE POLICIES OF THE GOVERNMENT OF ONTARIO AND BEST PRACTICES (ISSUES 2 AND 3)

Comments

Energy Probe concurs that despite criticism to the contrary, EGI has attempted to seek direction from the OEB and Ontario Government in a changing landscape. It has attempted to follow that Government Direction diligently in its evidence.

In April 2022, the Ontario Government Conservation Paper and projection was issued and more details on the Federal Conservation programs were available. Accordingly this changes the DSM landscape again.

EGI must respond appropriately to these changes and this requires substantial redesign of the residential program and integration with the Canada Greener Homes Program. This will require; changes to budgets targets/ program and offers. This will take most of a year to accomplish. As noted above, for 2023 the WHP 2022 program should be continued, with inflation adjustment to administrative cost, but new initiatives should await a redesigned DSM plan for 2024-2027.

Electrification

The issue of electrification of gas loads has been raised by certain parties to the proceeding.

The EGI Low Carbon Transition program proposes to pay incentives to gas customers who decide to install electric heat pumps. The low carbon transition program budget is split 50-50 between gas heat pumps and electric heat pumps. (See Section 10(f) for comments on Low Carbon Transition Program).

The Company submits that to offer both electric and gas options is wholly consistent with Minister Smith's Renewed Mandate Letter. The Company states it understood from the OEB DSM Letter that its program offerings should be directed at natural gas customers. This would not include incentivizing current gas customers to leave the system entirely and/or incenting potential new customers to not become natural gas customers. EGI notes there is no residential heat pump offer from the IESO. However it is noted that the federal government does offer residential heat pump incentives.

Energy Probe Comments re Electrification

Energy Probe is of the view that given government direction, electrification is going to occur, even at higher costs to energy consumers and taxpayers.

Parties that advocate for zero-carbon across all sectors by 2030, are ignoring the practical facts of embedded infrastructure, the higher costs for electrification and insufficient renewable generation in Ontario.

Natural gas is a preferred low carbon fuel and its increased use in certain sectors as a transitional strategy is appropriate.

Recommendation #2

While concerned about needs for replacement of gas infrastructure,[5] Energy Probe supports the actions that Enbridge is taking to assist the transition towards zero carbon through its DSM program, procurement of Responsibly-Sourced Gas, Renewable Natural Gas and pilot programs such as Electro-hydrogen blending.

4.0 TERM OF THE PLAN (ISSUE 4) .

As noted under Issue 3, changes to the DSM landscape require development of a new DSM plan for 2024-2027 following a continuation of 2022 programming in 2023.

In its April 11, 2022 letter the OEB asked parties to address (which relate to the term of the Plan) are changes in commodity costs and inflation. Enbridge Gas submits that such changes, whether hypothetical or real, should have no impact on the term of the plan. Changes in commodity costs are appropriately addressed through the avoided costs component of the TRC Plus Test which determines cost effectiveness. Increasing commodity costs will make program offerings that much more cost effective. If

[5] EB-2021-00146 St Laurent Project OEB Decision

inflation continues to increase, then the Application adjusts for this automatically by using the current inflation rate for the purposes of adjusting the annual budgetary envelope. Increases in commodity costs and inflation will ultimately increase the value of the annual gas savings that are generated

Comments on Term of Plan

Energy Probe is aware the frustration that EGI staff may feel about a reset to the residential program in 2024, but this is in the best interests of its customers.

Energy Probe supports a further one year continuation of 2022 residential programming for 2023 and a reset of the program for 2024-2027. If, the mid-term review, (now based on 2025 results, indicates the reset DSM program is meeting expectations, then the OEB could grant an extension for 2028-2030.

5.0 PROPOSED DSM FRAMEWORK (ISSUE 5)

The proposed new DSM Framework ("**Proposed Framework**") is set out at Exhibit C, Tab1, Schedule 1 of the Application. The Proposed Framework would be effective January 1, 2023. The Proposed Framework is based to a significant extent on the Existing Framework but certain revisions.

Proposed Framework was addressed in the hearing primarily related to program offering metrics and the target adjustment mechanism ("**TAM**").

The Company is proposing that the Proposed Framework have no sunset so that it can serve as a framework for future DSM plans.

The Proposed Framework deals with input assumptions and adjustment factors at Section 9. Adjustment factors continue to include net to gross adjustments to account for free ridership and spill over. Verification adjustments which account for installation, persistence of measures and savings verification are also continued.

The Company is proposing that the total resource cost-plus ("**TRC-Plus**") test continue as the determination of cost effectiveness. This includes the cost of carbon being included in avoided costs. The TRC-Plus test will continue to include the 15% non-energy benefit adder. The mathematical formula for this test is set out at pages 46 and 47 of the pre-filed evidence.[6] The Proposed Framework contemplates the continued use of a discount rate of 4% (real) consistent with the Existing Framework and the OEB's Filing Guidelines to the DSM Framework

Section 7.6 of the Proposed Framework addresses Integrated Resource Planning issues ("**IRP**") The IRP Decision and Order dated July 22, 2021 indicated geographically target pilot programs may occur over the term of the DSM plan but none are currently proposed

Avoided Costs

Avoided costs are identified at section 11 of the Proposed Framework. Under the Proposed Framework, the Company will continue to use the long-term estimates forecasted over the lifetime of DSM measures:

(i) Avoided natural gas commodity costs,

(ii) avoided natural gas upstream transportation and third-party services costs;

(iii) Natural gas seasonal storage requirement costs;

(iv) Avoided natural gas downstream infrastructure costs;

(v) Avoided natural gas fuel losses;

(vi) Avoided carbon costs; and

(vii) Avoided electricity, heating fuel oil, propane and/or water costs as are appropriate.

Ex-Post Evaluation

Enbridge Gas is requesting that the OEB direct Staff to coordinate the development of Ontario DSM evaluation protocols, with engagement from the Company and the EAC, with an initial version to be completed by December 31st, 2022.

Energy Probe Submission Ex-Post Evaluation

Ex-Post evaluation is a concern, if there is a delay that results in required adjustments to the Plan. Energy Probe is not privy to the details of the ex-post

[6] Exhibit C, Tab 1, Schedule 1, p. 46-47.

review. However the publication of results takes over a year. Reducing this to a maximum of 6 months is desirable.

6.0 DSM BUDGET (ISSUE 6)

The OEB DSM Letter and the OEB's anticipation of "modest budget increases in the near term" directive, and the OEB's observation that DSM budgets have doubled from the previous levels approved for 2012–2014.

Enbridge Gas has proposed a 2023 base year total budget of $142.26 million. This represents an increase of approximately 7.7% over the OEB approved 2020/2021/2022 budget levels[7].

The proposed budget envelope will increase to $170,400,000 by 2027 using a 2% inflation factor. With the 15% overspend in the DSMVA, the actual spending on DSM program offerings could total 15% higher than the budget envelope in a given year. As an example, the 15% overspend could result in a total spend in 2027 of just under $196,000,000.

The budget envelopes proposed by Enbridge Gas are higher than the assumption used in the Government of Ontario's recent March 25, 2022 release with its 2023 – 2030 modelling which included a 1.2% real factor.

The administrative costs that the Company will incur directly allocable to program offerings total approximately $11.8M in 2023. Of the additional $18.36M for portfolio costs, just under $3.9M are budgeted for evaluation and regulatory costs, just over $3.2M for research and development costs and approximately $2.7M for system maintenance and improvements and municipal engagement with the balance of about $8.5M being the forecast portfolio administrative costs which are the costs not directly allocable to program offerings.

Energy Probe Submission re Budgets

Energy Probe has already suggested that for the residential sector, the 2022 budget plus an inflationary 2% increase in administration costs is an appropriate 2023 budget.

[7] Exhibit D, Tab 1, Schedule 1, p. 9.

With inflation forecast to increase by over 3.5% in 2022, the 2023 Baseline Budget technically could be higher. However, 2022 plus inflation on administration costs, is an appropriate budget baseline.

Recommendation #3

The EGI proposed TAM proposal should not be approved

The Residential Sector Budgets for 2024-2027 should not increase above historic average 2% inflation.

Integration with the Federal programs will result in higher Ontario DSM spending. Ontario taxpayers are paying for the federal programs. The resultant integrated spending will result in an appropriate Budget Envelopes for 2024-2027.

7.0 COST RECOVERY (ISSUE 7)

In its April 11, 2022 letter the OEB asked for submissions from parties as to whether there should be amortization of DSM costs or the continuation of the current expense treatment.

The evidence of several experts is that amortization should only be undertaken if the OEB intends to materially increase the DSM budget so that there is less of a short-term rate impact than would be the case under the expense treatment.[8]

Energy Probe Submission re Amortization

Energy Probe has read and considered the Experts' evidence regarding Amortization of DSM Budgets and is opposed to Amortization for several reasons:

- Increasing DSM budgets even more than proposed by EGI
- The Federal Greener Homes program will add to EGI Budgets
- Paying the Weighted Average Cost of Capital (WACC) on the unamortized balances
- Complexities related to Clearance of DSM Accounts

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[8] Optimal Energy Report Exhibit L. OEB Staff; First Tracks Report,

- Intergenerational inequity.

Recommendation #4

Energy Probe submits that amortization of DSM budgets be rejected and expensing of DSM costs should continue to be the approved methodology.

8.0 SCORECARDS, TARGETS AND PERFORMANCE INCENTIVES (ISSUES 8 & 9)

The Company seeks approval for the 100% targets proposed for the purposes of its annual scorecard. These targets will then be adjusted annually using the TAM.

The TAM has been approved by the OEB with modifications for use by both EGD and Union. While certain parties have expressed concern about the use of the TAM in future, the fact is that none of the extreme hypotheticals raised by various parties has occurred.

If the DSM budget envelope was materially increased in 2023, it will be necessary to propose new targets for the base year 2023. Should this occur, it is important to note that an increase in budget will not result in a linear increase in savings generated. This is proven by the Company's response to OEB Staff interrogatory 13. In this response, the Company undertook a sensitivity analysis increasing the budget by 10% and 20% respectively. In both instances, it became clear that a 10% and 20% budget increase would not correspondingly translate into a linear 10% and 20% increase in savings. This non-linear relationship between budget and results was confirmed by the experts put forward by the SBUA, the Green Energy Economics Group.

For the annual RA scorecard, Enbridge Gas is proposing that each of the residential, low-income, commercial and industrial programs be given a 22% weighting.

The annual scorecard includes targets at the 50%, 100% and 150% levels. The Company has noted in evidence that there is simply insufficient budget for it to be able to approach reaching the 150% target. Indeed, the Company applied the methodologies it proposes in this Application (including it should be noted the net benefits shared savings scorecard) to the results generated by the legacy utilities in the years 2016 to 2020.

As outlined in the Proposed Framework, the proposed maximum annual shareholder incentive achievable for Enbridge Gas is based on the total amount approved for the utilities in the 2015-2020 Framework (and again for each of the 2021 and 2022 DSM

Plans). This is $20.9 million. This maximum shareholder incentive is divided between annual shareholder incentives and an additional proposed long term shareholder incentives[9].

$13.26 million in 2023, would be allocated to achievement relative to the annual scorecards. Enbridge Gas does not believe the maximum shareholder incentive should be allocated in proportion to budget.[10]

Energy Probe Submission: Scorecards Shareholder Incentives (Issue 8)

Energy Probe will confine its comments to the proposed Incentives, Target Adjustment Mechanism (TAM)[11] and the Resource Acquisition Scorecard that includes the Whole Home Energy Program.

The Incentives for the Resource Allocation programs are similar to historic. apart from the issue of the threshold and maximum of 50% and 150% (see below).

Energy Probe does not agree that the combined WHP should have the same shareholder incentive as the legacy utilities. There is now only one shareholder. However it appears from EGI evidentiary comments, that continuing legacy incentives has been accepted by the Board.

The long term Incentives of $7 million are simply out of line with underlying budgets and savings. The Board should reject paying EGI $5 million for achieving a Long Term GHG Reduction Target. First, ratepayers are paying the Federal Carbon Tax and the resource acquisition incentive of ~$20 million/year. Second EGI has a Corporate social responsibility to meeting national and provincial GHG targets, and should not be paid for this by ratepayers.

Recommendation #4

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[9] Exhibit D Tab1 Schedule 2 Tables 1 and 2

[10] Exhibit D Tab 1 Schedule 2 Para 6

[11] Exhibit C Tab1 Schedule 1 Section 5.2

Energy Probe requests the Board to reject the $5 million 5-year GHG Reduction incentive.

The Sectoral RA scorecard approach is reasonable. Continuing to count Low Income as a separate sector is also appropriate. However, the savings targets should reflect the magnitude of the expected sectoral gas savings, rather than equal allocations for the 4 sectors.

The Company has also included sub-sector weightings. For the Low-Income program, the scorecard provides a 50/50 weighting between single family Home Winter-proofing, and the Affordable Housing Multi-Residential offerings. For the commercial program, Enbridge Gas has equally weighted the scorecard such that half of its results must be generated from small commercial customers.[12]

Target Adjustment Mechanism.

Targets should be established on a fixed basis for all years of the DSM Plan, subject to amendment at the Mid-Term Review. The TAM by its nature locks in the status quo.

Recommendation #5

The EGI proposed TAM proposal should not be approved

Regarding the Scorecard, Targets and Incentives

Recommendation #6

Energy Probe supports the proposals by Mr. Neme of Energy Futures Group. For the RA scorecard EGI should only start to earn an incentive at 75% of Target and maximum of 125% of Target.

However, Energy Probe supports first year savings is an appropriate metric rather than lifetime savings for the residential sector.

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[12] Exhibit D, Tab 1, Schedule 3, p. 4, Table 2.

9.0 PROGRAMS AND PROGRAM OFFERINGS (ISSUE 10)

Issue 10a. Are Enbridge Gas's proposed program offers for residential customers appropriate?

WHOLE HOME PROGRAM OFFERING AND GREENER HOMES (ISSUE 10(A).

The OEB has asked in its April 11, 2022 letter for submissions relating to the approvals sought in respect of the Company's proposed residential program and in particular, the residential whole home program offering in light of the negotiations with NRCan.

The April 11, 2022 letter also invited parties to address:

- The mix of measures and technologies offered, whether financial incentives should be available for gas fired measures or fuel switching measures;
- Whether Enbridge Gas' incentive should be combinable with incentives from other programs; and
- If any programs fail to meet the objectives outlined in the OEB's Letter of Direction and Minister's mandate.

EGI states it uses the modest incentive available for natural gas furnaces, boilers and water heaters as a means of attracting and marketing the whole home program offering to HVAC Contractors.

As stated on numerous occasions, EGI believes the objective of this program offering is not to incent the installation of slightly more efficient gas fired residential equipment, but rather to incent the homeowner through the HVAC contractor to undertake additional measures including the costly measures associated with upgrading the home's envelope.[13]

The Company view is that proposing elimination of such incentives is micromanagement and inappropriate, it is also of the view that it makes no sense to prohibit the use of this incentive as a

[13] TR. Vol 2, pp. 30-32.

Marketing tool when it is clear that the natural gas savings that are generated are substantially generated as a result of the measures undertaken involving non-gas fired equipment[14].

Enbridge Gas interprets the second question asked by the OEB above to relate to the question of whether program offerings are "stackable" primarily from the perspective of residential and commercial customers. The Company gave a detailed response to this question at Exhibit JT 2.8 where it compared the measures available to residential and commercial customers.

In its AIC Enbridge notes whether or not the 100% target for the Whole Home Program should be adjusted to reflect the fact that Enbridge Gas will be delivering a combined program. In this regard, the Company proposes that an update be filed with the OEB once a final agreement has been reached, which would include any proposed adjustments at that point in time[15].

Optimal Energy/Board Staff -Residential Sector Recommendations

Optimal Energy provided two reports. The first was discussed under issues 3-6.

The second is a critique of the proposed EGI Programs, including the Residential Whole Home Program[16].

Optimal provided 12 recommendations:

1. Coordinate delivery of the gas program with the equivalent electric utility program.
2. ***Ensure that expenses related to home audits are completely covered by the program (as opposed to paid by the customer and rebated).***
3. Lower the barriers of participation in the whole home program by training a set of qualified contractors who offer standardized pricing.

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[14] AIC Para 84
[15] AIC Para 91

[16] Exhibit L, OEB Staff 2-OEB Staff Expert Evidence; Optimal Energy- Program Review Report

4. Offer incentives for pre-weatherization barriers and health and safety.

5. ***Eliminate furnaces and boilers completely as offered measures, as they are now code baseline, and any promotion through the program creates a lost opportunity for electrification.***

6. Consider offering 0% financing for weatherization and pre-weatherization measures.

7. Ensure that multi-family buildings and renters/landlords are adequately coveredby targeted messaging and participation pathways, and integrating residential and commercial and industrial (C&I) offerings with a one-stop-shopping experience.

8. Proactively coordinate with other funding sources such as government or non-profitprograms to offer enhanced incentives where possible.

9. ***Perform direct installation of low-cost measures such as aerators, showerheads, smart thermostats, and pipe insulation during the initial energy assessment.***

10. Use virtual audits and hybrid audits to add more customized program participation pathways.

12. Consider adding a midstream smart thermostat program.

[The highlighted recommendations are those Energy Probe find to be most meritorious to the redesign of the Whole Home Program.]

Energy Futures States in its Report[17]

"In short, given both climate policy concerns and the state of the current market for furnaces, we would recommend that *Enbridge's proposed gas-equipment rebates be removed from its proposed program.* Removal of both gas furnace and gas water heater rebates would also facilitate alignment with the federal program".

Energy Probe Submission Whole Home Program

The Residential Whole Home Program (WHP) has a 2023 proposed Budget of $40,804,802 comprising almost 30% of the Total DSM Budget.

[17] Exhibit L Energy Futures Report page 36

Energy Probe submits that in its view, the design of the Residential WHP is flawed and needs a complete redesign of its component measures and incentives. The reasons for this are:

- The Overall Program TRC is only 1.61 [18] (except for the Smart thermostat measure TRC=3.81)
- Providing incentives for above-code furnace and boiler replacements, that have a TRC<1.0[19]
- Providing incentives for Attic, Basement and Exterior Insulation, without calculating these incentives on a cost/square foot basis;
- Dropping the ex-ante ex-post audit requirement for single measure (TRC=1.19)
- Inadequate Incentives for Air Sealing and Insulation compared to the Greener Homes Canada Program
- Requirement to Integrate WHP and the Greener Homes Program

Energy Probe will address these issues with reference to the individual program measures and incentives and will reference the two Expert Reports by Optimal Energy, and the Energy Futures Group.

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[18] Exhibit D Tab 1 Schedule 1Tables 1-4

[19] EFG Presentation Day Slide 19

Table 1 Whole Home Program Measures and Incentives[20]

Measure	Criteria	Incentive
Attic Insulation	Increase insulation from R35 or less to at least R60	$650
	Increase cathedral/flat roof insulation by at least R14	$650
Air Sealing	Achieve 10% or more above base target	$150
	Achieving base target	$100
Basement Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R23 insulation to 100% of basement	$1,250
	Add at least R12 insulation to 100% of basement	$750
	Add at least R23 insulation to 100% of crawl space wall	$1,000
	Add at least R12 insulation to 100% of crawl space wall	$500
	Add at least R23 insulation to 100% of floor above crawl space	$1,000
Exterior Wall Insulation Must upgrade a minimum of 20 per cent of the total wall area	Add at least R20 to 100% of building	$3,000
	Add at least R9 insulation to 100% of building to achieve a minimum of R12	$1,750
	Add at least R3.8 to 100% of building to achieve a minimum of R12	$1,000
Furnace/Boiler	For replacing a less than 96% AFUE natural gas furnace with a 96% AFUE or higher condensing natural gas furnace; OR,For replacing a less than 90% AFUE natural gas boiler with a 90% AFUE or higher condensing natural gas boiler.	$250 for furnace $1,000 for boiler
Water Heater	Replace existing natural gas water heater with 0.80 EF or higher tanked ENERGY STAR® qualified natural gas water heater. Or Replace existing natural gas water heater with 0.87 UEF or higher tankless ENERGY STAR qualified natural gas water heater.	$400
Window/Door/Skylight	For each window, door or skylight replaced with an ENERGY STAR qualified model.	$40

[20] Exhibit E Tab 1 Schedule 2 Page 12

WHP TRC ratios

In its interrogatory responses to Environmental Defence and Energy Probe, EGI refused to provide measure-level TRC ratios, indicating this is not relevant, since the program is a package and only relevant number is the overall TRC of 1.61.

Other experts, such as Energy Futures Group, have analysed some measures, such as furnace and boiler replacement[21] and exterior insulation[22]

Energy Probe submits it is inappropriate for EGI to propose measures, without subjecting these to individual TRC plus and PAC tests, even if the WHP design is for a package.

Furnace and Boiler Replacements

Ontario Code now requires AFUE of 95% minimum for forced furnaces and similar for hydronic boilers (as opposed to water heaters)

As noted above, EGI continues the incentives for above code furnace ($250) and boiler ($1000) and water heater replacements ($250) even though the TRC is below 1.0 as demonstrated by EFG[23].

Both Experts recommend that EGI *Eliminate furnaces and boilers completely as offered measures[24],*

Energy Probe disagrees with the EGI position that this incentive is necessary for attracting HVAC contractors.

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[21] Ibid 11: $250 rebate for 96% furnace provides only $110 in benefits because of min standard of 95%

[22] JT 3.4: it would appear that insulating an uninsulated exterior wall could be quite cost-effective, with a benefit-cost ratio on the order of about 1.8 to 1.

[23] Exhibit JT2.17:Incentives paid in 2021 furnaces $2,347,250, boilers $496,000, water heaters$1,697,200

[24] Ibid 11 and 13 (Recommendation 5)

As suggested in cross-examination[25] the HVAC contractors could offer a free smart thermostat installation instead. This will ensure the heating system is optimized, saving the homeowner money. The TRC for Smart Thermostats is 3.81.

Insulation Measures

All insulation measures and incentives should be calculated based on both R-Value and Square footage.

If this is not done, it creates major inequities between customers based on size of home.

The ex-ante audit will determine the size of the home as well the baseline insulation levels. The HotCan Program uses both area and R values as inputs for each insulation measure. Accordingly, there is no reason not to base incentives for insulation upgrades based on R value added and area.

A Townhouse on a 25 foot wide lot is not the same area as a detached home on a 50 foot lot. Incentives should not be the same from the same baseline R values.

Using an average does not work, some customers gain and others lose, for the same measure.

in response to an Energy Probe Technical conference undertaking Energy Futures provided an analysis of exterior insulation.[26] This shows it to be cost effective with a TRC of 1.81.

However the Incentives for Exterior insulation are not calculated on an area basis and are too low ($3000). As noted below, the Greener Homes Program offers up to a $5000 grant**.**

Air Sealing

For older homes air sealing is a key measure. Measuring infiltration (air leakage) of the home is part of the initial ex ante and ex-post evaluations.

While the cost to the homeowner may be modest relative to insulation, the impact can be significant.

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[25] Tr. Vol 3 Page

[26] Ibid 14

The incentive of up to $150 for the air sealing measure is too low. Infiltration levels of 2-3 times Code are common for older homes and the incentive should encourage greater time and effort by the homeowner and contractors. For Low income home owners this can be a very cost effective measure. EGI has not provided in evidence either the infiltration levels for the base target and the TRC for the base target and 10% above.

Energy Probe suggests the air sealing measure needs to be examined further and if warranted, the incentive of $150 increased to at least $450 commensurate with the levels of improvement in infiltration and as high as the $1000 GHC incentive.

Single Measure

EGI proposes to drop the ex-ante ex-post audit requirement for single measure (TRC=1.19)

It was clarified by EGI that the single measure could not be a furnace, boiler or water heater replacement, but could be air-sealing. This is an oxymoron. Previously to participate in the program an energy audit was required that included an infiltration test.

The Smart Home Program provides an incentive for a Smart Thermostat and the Single measure air-sealing measure.

If air sealing is eligible as a single measure, the ex-ante and ex post infiltration measurements are still required.

Recommendation #7

The design of the Whole Home Program be rejected.

EGI should be directed to carry the 2022 residential WH program into 2023 with only an increase in administrative costs,

EGI be directed redesign the program for 2024 to increase the program TRC, eliminate furnace rebates, revise incentives and integrate the program with the Greener Homes Canada Program.

INTEGRATING WHOLE HOME AND GREENER HOMES PROGRAM OFFERING (ISSUE 10(A))

The Company's evidence indicates that it intends to deliver the combined WHP/GHP to all areas of the province, including those outside its franchise areas and to non-natural gas customers. The Company has stated that by combining the programs, there should be modest administrative savings but a material increase in the number of program participants in the combined program.[27]

Enbridge Gas did not provide a comparison of incentives between the WHP and GHP

Table 2 Eligible Measures and Maximum Grants WHP and GHP

Program/Measure	WHP max	GHP max[28][29]
Attic Insulation	$650	$1800
Basement Wall Insulation	$1000	$1000
Floor insulation	0	$350
Exterior Insulation	$3000	$5000
Air Sealing	$150	$1000
Thermostats	$50	$50
Heating	$250-1000	ASHP $5000
Windows & Doors	$40	$5000
Renewable Energy	0	$5000
Resiliency Measures*	0	$2625

***Batteries/PV, Roofing Membrane, Foundation Waterproofing, Moisture-proofing**

Comments on WHP and GHC Programs

The comparison shows the Federal GHC covers more measures and provides higher grants than the Enbridge WHP.

EGI states, "the integration of the two programs will benefit all Ontario Energy Users including, but not limited to, Enbridge Gas customers".

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[27] Technical Conference TR. pp. 151-152.

[28] NRCan GHC website

[29] Windfall Home Energy Web Site

The need for a *single program offering for Ontario residential gas customers* is another reason why the OEB should not approve the proposed WHP for 2023, but rollover the 2022 program into 2023[30].

Accordingly as noted above, the Board should freeze the 2023 WHP Budget at 2022 levels and direct Enbridge to redesign its WHP as an integrated WHP/GHP offering for 2024-2027.

If EGD is able to redesign its WHP earlier than 2024, it can seek OEB approval.

Low Carbon Transition Program (Issue 10(J))

The Low Carbon Transition Program (LCTP) offers hybrid heating with smart controls which incentivizes the replacement of the central air conditioner with an electric air source heat pump and upgrades the thermostat. This solution could include an electric cold climate heat pump.[101] Hybrid heating, as noted by expert witness Dr. McDiarmid, is more efficient than conventional gas systems and could help create a market.

The Company does not believe that all-electric heating solutions provide any benefit over a hybrid electric/gas solution at the present time, for most existing natural gas customers and could in fact increase the homeowner's energy costs[31].

Energy Probe Comments on Low Carbon Transition program

Energy Probe accepts that the decision to adopt either an all-electric or electric/gas heat pump system is that of the homeowner (assisted by HVAC contractor).

Incentives for all-electric heat pumps are available from the Greener Homes Canada program.

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[30] TR Vol 3 Page 60

[31] Exhibit I.10h.EGI.STAFF.77, pp. 3-8.

Recommendation #8

Enbridge should facilitate the homeowner decision by accepting both all-electric and electric/gas hybrid heat pump systems for all customers with an account with Enbridge.

The current heating system replacement measures are under the Resource Acquisition programs. Heat pump replacement systems should also be a measure under Residential RA programs.

10.0 COLLABORATION WITH IESO AND MUNICIPALITIES (ISSUE 16)

Coordination with IESO

In its Evidence-in-Chief, the Company spoke to Exhibit K1.1 which identified all of the program offerings that are undertaken jointly or in coordination with the IESO. As noted in the oral proceeding, the IESO does not have residential programs other than for low income.

Coordination with Municipalities

EGI indicated its plans for enhanced municipal engagement.[32] Enbridge Gas notes that municipalities play the critical roles of "influencer", "promoter", "enabler and enforcer" of strategies, policies and programs seeking to reduce GHG emissions. In 2021, in an effort to further support municipalities in reaching their emissions targets, Enbridge Gas formed a new Municipal Energy Solutions team to assist with the development and execution of municipal plans and energy plans.[33]

Energy Probe Comments re Coordination

Although at present IESO has no residential CDM programs, except for Low Income, EGD can assist its customers by extending the home energy audit to include a basic electrical energy audit. This would primarily focus on a lighting questionnaire that would

[32] Exhibit E, Tab 4, Schedule 1, pp. 3-5.

[33] Exhibit E, Tab 4, Schedule 1, p. 4.

document installed lighting by the basic incandescent, fluorescent and LED types. Lighting incentives are no longer available from IESO except for low income homes, but given the audit, homeowners can replace inefficient lighting on their own. EGI should negotiate a fee for each lighting audit with the IESO.

There is concern expressed by certain parties that EGI is promoting gas solutions to municipalities, EGI has denied this.

However for greater certainty, the Board should express that EGI should adopt a “fuel neutral” approach in coordination with municipalities.

Recommendation #9

In Coordination with IESO, EGI should provide a basic lighting audit for participants in the Whole Home Program.

Recommendation #10

EGI adopt a fuel neutral approach in its coordination with Ontario Municipalities.

11.0 STAKEHOLDERING (ISSUE 17)

The Company proposes in its pre-filed evidence[122] that in respect of future stakeholder consultations, to host an annual DSM stakeholder meeting shortly following the completion of the draft annual DSM report. The goal of these meetings will be to provide ongoing communication, share information and ideas and facilitate meaningful discussions with stakeholders.[34]

In addition to DSM stakeholder meetings, the Company intends to regularly engage with its residential stakeholders throughout the DSM plan term and solicit feedback from contractors, municipal partners and service organizations.

Energy Probe has no Comment on Stakeholder Engagement

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[34] AIC Para 109

12.0 Summary of Recommendations

Recommendation #1

The Board reject the EGI Residential Whole Home Program budget proposals and freeze 2022 DSM budgets for the residential sector Whole Home Program and rollover the program into 2023 with only an inflationary increase in administrative budget.

The Board direct EGI to file an updated 2024 residential program that demonstrates improved TRC ratios, eliminates furnace rebates, with a revised budget, fully integrated with the Federal Greener Homes Canada Program.

Recommendation # 2

The Budgets for 2024-2027 should not increase above historic average 2% inflation.

Integration with the Federal programs will result in higher Ontario DSM spending. Ontario taxpayers are paying for the federal programs. The resultant integrated program spending will result in an appropriate Budget Envelopes for 2024-2027.

Recommendation #3

The EGI proposed TAM proposal should not be approved

Recommendation #4

Energy Probe submits that amortization of DSM budgets be rejected and expensing of DSM costs should continue to be the approved methodology.

Recommendation #5

Energy Probe requests the Board to reject the $5 million 5-year GHG Reduction incentive.

Recommendation #6

Energy Probe supports the proposals by Mr. Neme of Energy Futures Group. For the RA Scorecard, EGI should only start to earn an incentive at 75% of Target and maximum of 125% of Target.

However, Energy Probe supports first year savings is an appropriate metric, rather than lifetime savings for the residential sector.

Recommendation #7

The design of the Whole Home Program be rejected.

EGI should be directed to carry the 2022 residential program into 2023 with only an increase in administrative costs,

EGI be directed redesign the program for 2024 to increase the program TRC, eliminate furnace rebates, revise incentives and integrate the program with the Greener Homes Canada Program.

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EGI adopt a fuel neutral approach in its coordination with Ontario Municipalities.