

EB-2015-0049

Ontario Energy Board

ONTARIO ENERGY BOARD
IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
S.O. 1998, c. 15 (Schedule B);

AND IN THE MATTER OF an Application by Enbridge Gas
Distribution Inc. pursuant to Section 36(1) of the *Ontario*
Energy Board Act, 1998, S.O. 1998, for an order or orders
approving its Demand Side Management Plan for 2015-2020

Compendium Materials
Synapse Panel
Energy Probe Research Foundation

August 30, 2015

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UNDERTAKING JT4.4

UNDERTAKING

August 18, 2015 Technical Conference Transcript, page 29.

To examine further Energy Probe's requests for analysis.

RESPONSE

In response to Enbridge Interrogatory #4 (Exh. M.Staff.EGDI.4), Synapse explained that we were asked by the OEB Staff to review the proposed DSM programs and comment on the program design elements that could be modified or improved. We were not asked to identify a specific quantitative outcome resulting from any recommendation, nor were we asked to quantitatively assess how our recommendations might affect the program budgets. Consequently, we have not prepared such quantitative estimates because they are outside of our scope of work for the OEB Staff.

In our report we make the following points regarding budget constraints:

Lastly, as Ontario's gas DSM programs are subject to a budget guideline maximum, as set out in the OEB's DSM framework, we recommend the utilities take a cautious and balanced approach when considering adopting our recommendations so that new changes would not push the utilities' programs over the current proposed budgets. Some of our recommendations (such as improving program design and adding new measures) would increase program participation, which would result in an increase in incentive amounts and budget. On the other hand, other recommendations (such as reducing freeridership, eliminating unnecessary measures, and providing financing) would decrease program budgets. In summary, both utilities should consider and balance potential improvements on participation rates, energy savings, cost-effectiveness, and a potential increase or decrease in budget from each recommendation, and determine which recommendations to adopt within their constraints. (Exhibit L.OEBStaff.1, page 2.)

At this point we wish to make one clarification to the text quoted above. While it is true that the utilities should balance our recommended program improvements with their budget limitations, it is of course ultimately the Board that must decide on the appropriate balance.

At a minimum, we recommend that the Board should direct the utilities to adopt all of our recommendations that are likely to reduce program costs. The Board should also consider directing the utilities to adopt all of our recommendations that are expected to be relatively low cost but with significant benefits.

Witnesses: T. Woolf
K. Takahashi
E. Malone
J. Kallay
A. Napoleon

UNDERTAKING JT4.3UNDERTAKING

August 18, 2015 Technical Conference Transcript, page 26.

To review and comment on Exh. M.GEC.1.EP.5.

RESPONSE

In Exh. M.GEC.1.EP.5, Mr. Neme states:

I disagree with Synapse's suggestion to drop the requirement that customers install at least two major measures to participate. I think the requirement promotes greater comprehensiveness and good retrofit practice. Frankly, Synapse's concern about leaving on the table savings from customers who may only want to replace a furnace is misplaced. Synapse may not have been aware that equipment standards in Ontario already mandate that all new furnaces be condensing, so there are limited additional savings possible in that market. Further, one should always perform air sealing (one of the eligible major measures) before installing insulation. To not do so not only "leaves savings on the table" that will rarely be captured later, it could also degrade the effectiveness of the insulation itself by allowing moisture to get trapped and absorbed by the insulation material.

In response, please refer to Exh. M.Staff.EP.3, part d, where Synapse states:

Our recommendation is simply that customers looking to install one measure should not be turned away from the program; our recommendation is not that the utilities should only focus on one measure per customer or should remove focus from installing two measures per customer.

We do not disagree with Mr. Neme that an offering that focuses on installing two measures promotes comprehensive and good retrofit practice. Further, we agree with Mr. Neme that some types of measures are complimentary, such as insulation and air sealing, and that they should be installed at the same time.

However, some customers may only be interested in or can afford to install stand-alone measures such as new windows or water heating systems at one time. For example, when a boiler or furnace breaks, there may be cases where installing just the new energy efficient boiler or furnace is the only cost-effective opportunity at that time. Further, there may be customers who treated windows or installed wall insulation a few years ago either on their own or through one of the gas or electric utilities' DSM programs. For such customers, there may not be additional efficiency opportunities when they replace

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their old heating system. We believe energy efficiency programs should not turn away such customers from participating. It is overly restrictive to mandate that at least two measures are installed as a prerequisite to participation, and we do not think such a program requirement is necessary.

Energy Probe Exhibit K. SEE Recommendation Impact Assessment					
Enbridge Program/Offer	Synapse Recommendation(s) Per Appendix A3	Qualitative Assessment of Potential Impact(s) on Budget, Participation and Savings [reduce, none, increase, other]			Comments
		Budget	Participation	Savings	
Home Energy Conservation Program	5.2.5 #3 Incentive for high efficiency. space and water heating equipment				
Home Energy Conservation Program	5.3.2 #1 Drop the Two Deep measure Provision				
Home Energy Conservation Program	5.3.2 #3 Restructure Incentive				
Home Energy Conservation Program	5.3.2 #4 Increase incentive cap up to max of \$5000				
Home Energy Conservation Program	5.3.2 #8 Provide Additional Measures				
Residential Savings By Design Program	5.6.2 #2 Incent builders for fewer homes				
My Home Health Record (MHHR)	5.6.3 #3 Assess/justify the Budget				
Home Energy Rating/Labelling	5.6.4 #3 Incentive to homeowners and/or real estate agents prior to the sale				

5.3 Residential Resource Acquisition Programs

5.3.2 Single-Family Retrofit: Recommendations

Enbridge

1. Enbridge should remove the requirement that customers must install at least two DSM measures to participate in the offering. Customers seeking to install one DSM measure at a time should not be turned away from the program.
2. Enbridge should focus not just on higher income homes, but on moderate income homes as well.
3. Enbridge should increase the offering incentive cap to be greater than \$2,000. For example, Enbridge could be consistent with Union's incentive cap of \$5,000.
4. Enbridge should reconsider its tiered incentive structure, and consider offering a sliding scale incentive structure that should start at a lower savings level than the current 15 percent savings. This would to accommodate some customers that could just install one measure at a time.
5. If Enbridge continues to offer a tiered incentive structure or offers a sliding-scale incentive, then it should lower the amount of savings required to achieve the various incentive levels or increase the level of incentives. As currently structured, a customer is required to achieve a significant reduction in usage in order to receive a relatively limited incentive amount.
6. Enbridge should consider providing incentives such that they are structured on a per-square-foot basis, or on a percentage-of-total-project-cost basis for insulation measure. In addition, it should provide prescriptive incentives for other measures similar to Union's incentive structures. Such a structure provides flexibility to the customer, thereby allowing households of different sizes, shapes, and energy consumption to participate.
7. Enbridge should provide the required home energy audits at no cost to the customer.
8. Enbridge should provide additional measures as part of this offering, such as faucet aerators, showerheads, programmable or adaptive thermostats, lighting measures, or smart strips. Such an offering ensures a holistic approach to program savings.
9. Enbridge should include in its impact evaluation plan a proposal to conduct a billing analysis for this offering.
10. Enbridge should adopt Union's survey approach for its process evaluation.
11. Enbridge should conduct any desk review of program records, data tracking systems, and materials such as marketing materials, training documents, and program manuals.

Synapse Report Recommendations Appendix A3/A4

Transcript Excerpts

Transcript Volume 8 Page 3-4

MR. LISTER: If I could add to that, Dr. Higgin,

on page 26 of the framework as well, the Board specifically notes that, in terms of programming, item F on that page, that:

"...ensure that programs take a holistic approach and identify and target all energy saving opportunities throughout a customer's home or business."

And that is exactly what our home energy conservation program attempts to do.

MR. O'LEARY (sic) So to cut it to the short, you'd agree with Mr. Neme, your program is designed that way, and you do not agree with Synapse?

MR. LISTER: I think that's a fair assessment. We believe that the home energy conservation program is properly designed to achieve holistic whole-home savings.

Transcript Volume 8 Page 5.

DR. HIGGIN: Thank you. So could we look at recommendation 3 on page -- on the Synapse report. As it says there, basically it is suggesting that you should increase the offering incentive cap to more than \$2,000 and perhaps go up to \$5,000, so what's your response to that, and obviously in that response, indicate whether it will increase participation and whether it will lead to more savings and, of course, probably a much higher budget.

MS. BERTUZZI: Yes, I would agree. It's not that we're opposed to adding more to the budget to reach more participants, but to date we haven't had a concern in reaching participants through our program and our -- incentive and our program structure.

MR. LISTER: As well, Dr. Higgin, we talked a lot with panel 1 about the budget guidance that was provided by the Board. This program in particular, as I'm sure you know, is very budget-sensitive, and that was a point you were making in your question, so while a much higher target -- I guess to sum it up, a much higher target would result in significant budget increase.

Transcript Excerpts

Transcript Volume 8 Page 6-7

DR. HIGGIN: Oh, okay. Thank you very much.

So can you look at number 8 recommendation? So this talks about what -- sorry, Madam Chair -- what we tend to call shallow measures, correct? Mass market shallow measures. And they're suggesting that these should be offered either within HEC or as a separate offering outside, rather like mass market, as you did with TAPS, for example.

So, perhaps you would like to tell us what your reaction is to this proposal and how it would fit within the HEC program. Or would it be outside of the program as a mass market measure?

MS. BERTUZZI: As I indicated earlier, we ended the TAPS program in 2012 and it reached 1.2 million customers. That consisted of shower heads and aerators and programmable thermostats.

We did data analytics at the time to determine kind of what was that real potential left in the marketplace, and we were at approximately about 300,000 customers that we hadn't reached through that program.

They are not necessarily cost effective, which is why we ended the program in 2012, because the free ridership rate was increasing on those measures, and also the non-install and removal rate was between 60 and about 78 percent in the marketplace. Does that answer?

DR. HIGGIN: Do you have an opinion whether these measures, or have you screened some of them, would meet the TRC plus test, or would with they likely not?

MS. BERTUZZI: From our history on the program, they would likely not reach the TRC screening test as it is today.

MR. LISTER: The bottom line is they would add considerable budget for very few, if any, incremental savings.

5.6 Residential Market Transformation Programs

5.6.2 Residential New Construction: Recommendations

Enbridge

1. Enbridge could consider expanding its marketing to other stakeholders and decision makers in the new construction market, including architects, developers, contractors, and homebuyers.
2. Enbridge should consider whether it is an appropriate use of program spending to incent builders for up to 50, 100, or 200 energy efficient homes, or whether fewer homes would be as effective.
3. Enbridge could provide additional services related to technical training during the design/build process.
4. Enbridge should follow Union's survey plan for its process evaluation and include homeowners, non-participating builders, program staff, and consultants as surveys.
5. Enbridge should make sure that its process evaluation plan includes a review of program materials and reporting.

Union

1. Union should not turn away builders that are not already enrolled in the program, as doing so would create lost opportunities.

5.6.3 Residential Behaviour: Recommendations

Enbridge

1. Enbridge should work with OPower to ensure they have the customer data needed to individualize the reports to the extent practicable.
 2. Enbridge will need to ensure that the emailed reports are actually received by the recipients, and are not captured in email junk mail filters.
 3. Enbridge should assess the offering budget to determine whether it can be reduced, or should at least justify the seemingly high amount budgeted for this offering.
 4. Enbridge's evaluation plan should follow the impact evaluation approach proposed by Union.
 5. Enbridge's survey plan should also include offering delivery agents (e.g., Opower) as well as non-program participants.
 6. Enbridge should also conduct a review of offering materials and reporting.
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Home Rating (Enbridge Only): Recommendations

Enbridge

1. Enbridge should detail the actions it expects to take within this offering so as to determine whether such activities are an appropriate use of program spending.
2. Enbridge should conduct a billing analysis on a sample of offering participants to verify energy savings to the extent the savings are expected to be substantial.
3. Enbridge could investigate whether providing an incentive to homeowners and/or real estate agents that complete a home energy label prior to the sale of the home would increase adoption of home labeling. Its process evaluation study is an appropriate place for this investigation.
4. Enbridge should include other key players as surveyees, in particular real estate agents and program administrator staff.