EB-2015-0049

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.

Final Submissions
Energy Probe Research Foundation

October 2, 2015

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(i) Introduction – Context for Submission

This submission is focussed on and discusses, the proposed Enbridge Gas Distribution Residential DSM Plans for 2015 and 2016-2020.

These are the Plan Programs/Offers for which the Budget/Spend (without shareholder incentives) is allocated to Enbridge's Rate 1 Residential Customers. This amounts to $28 million in 2016 and rising to $41 million in 2020.

When necessary and appropriate, comparisons are made of Budgets and Targets, within the Resource Acquisition Component of the Plans.

When examining in detail Enbridge Programs and offers, comparisons to Union Gas are made where appropriate.

However, no submissions or recommendations are made in regard to Union's proposed 2015-2020 DSM Plans. However, some Framework issues apply equally to Enbridge and Union.

(ii) Executive Summary

<u>At a high level, the 2015 and 2016-2020 5 year Plans and savings targets proposed by Enbridge do not fully meet a Goal of achieving "All Achievable Cost-Effective DSM". The reasons are summarized below</u>

Mr. Neme - the expert for GEC, who has been involved with Stakeholders in Gas DSM in Ontario for many years, provides 4 high level reasons that drive the utilities' relatively low savings targets:

1. Budget constraints – both utilities' limit their DSM budgets to the levels suggested in the Board's recent gas DSM framework and guidelines;
2. Union's cancelling of its large industrial program – Union followed the framework's/guidelines' suggestion to stop offering its self-direct program;
3. Greater emphasis on smaller customers – both utilities' propose placing greater emphasis on treating efficiency opportunities from residential and smaller business customers, from which savings are typically more expensive to acquire (though still cost-effective); and
4. Conservative savings estimates – both utilities appear to use conservative assumptions regarding the savings yields from some of their proposed programs.

Other than disagreeing with Mr. Neme's position on the Board's DSM Budget Guideline which we address below, Energy Probe supports his high level conclusions, based on our own assessment and review of Enbridge's proposed DSM Plan.

Synapse Energy Economics Inc. - the experts hired by Board staff, have considerable experience in both Gas DSM and CDM in the US, particularly Massachusetts. However, despite providing a large number of detailed critiques and recommendations, in our view Synapse did not provide the Board and Stakeholders with an independent high level assessment of the Plans from an "all achievable cost-effective DSM" perspective.

In our view, this was in part a result of the mandate they were given, their lack of familiarity with Ontario's DSM Programs, compounded by the failure to interact directly with Enbridge and Union during their review.

The main value of Synapse's detailed recommendations is that although not accompanied by any impact analysis, they are an independent expert opinion, based on best practices and accordingly provide useful input regarding how to modify/improve the detailed Program Plans.

2015 DSM Program

2015 Transition Year Program is extremely problematic in terms of Enbridge's likely failure to meet Resource Acquisition Targets. This is in part due to basing the targets on 2014 Targets, together with reallocation of resources within RA Programs resulting in higher notional budgets for the Residential Home Energy Conservation Program which ran out resulting shut down of the HEC.
2015 Incremental Budget funds were available but rather than maintaining the HEC Program, $2.5 million was used to launch of the My Home Health Record program with OPower that provides minimal lifetime savings. Certain proposals are discussed to mitigate these issues.

2016 Onward

Energy Probe urges the Board to maintain the DSM Budget Guideline of about $2.00 per month for non-participants, direct revision of the Enbridge RA Scorecard and re-allocation of resources within the RA programs and from certain MTEM programs.

Energy Probe disagrees with GEC, Environmental Defence and others, that "fixing" the DSM Plans starts by overriding the OEB Budget Guideline. This is because:

- No credible case has been made regarding the quantification of the claimed *"benefits putting downward pressure on rates*".
- No evidence has been advanced that other jurisdictions have explicitly taken these "benefits" into account in approving DSM Plans and Budgets (but rather as part of the TRC screening of measures and program offers).
- The claimed benefits are speculative, especially in regard to carbon costs and distribution avoided costs and are long term with no relationship on Rate Impacts in the short term period of the Plans. Whereas, DSM spending of well over $300 million by each utility over 5 years directly impacts on rates under the Company's IRM Plans.

- The claims that non-participants will receive significant tangible and intangible benefits, completely ignores intergenerational equity considerations, an important consideration for regulators when approving utility infrastructure and facilities
- Finally, increasing the Budget Guideline "Cap" is unfair to non-participants in the programs and other steps can and should, be taken to improve the outcomes (total CCM) of the Plans, without increasing the rate impacts on non-participants.

To "fix" and improve the Enbridge DSM Plan and importantly its outcomes for the initial period, prior to the mid-term review, it is suggested that at a high level, the Board needs to provide direction to Enbridge in several key areas, including:

- Rebalancing participation, maximizing savings and efficiency ($/CCM) within the main Resource Acquisition Programs (Residential vs C/I)
- An upper performance level of 125% on the RA Scorecard (consistent with Union).
- Establish new (higher) RA "Stretch" targets for the 125% target level.
- Reduction of the budgets for MTEM programs, including in particular, the Home Rating/Labelling and Enbridge's My Home Health (OPower) offer and reallocate the funds to RA programs.

(iii) Recommendations

The Board confirm that $2.00 per month resulting from DSM Program costs is an appropriate level of rate impact for a typical Enbridge Residential customer. **[Page 12]**

The Board reconsider the requirement for additional DSM Potential Studies during the DSM Plan Term. **[Page 14]**

The Board should deny the carryover of any of the 2015 Incremental Budget surplus from 2015 to 2016 and direct it to be returned to ratepayers. **[Page 18]**

To protect ratepayers, the Board should direct EGD to amend the 2016 RA Scorecard to separate the RA Residential and C/I Metrics, adjust weighting appropriately and reduce the upper 150% target level to 125% of Mid 100% target. These changes align the structure of the Enbridge and Union RA Scorecards and should carry forward into 2017-2020. **[Page 22]**

The Board should direct Enbridge to increase the 2016 100 % RA target by about 10% to about 1000 million CCM and correspondingly, a revised Upper 125% stretch target. These revisions should be carried forward into 2017-2020. **[Page 22]**

Along with directing Enbridge to restructure the RA scorecard, the Board should consider requiring Enbridge to amend the weighting. An appropriate weighting could be Residential CCM 20% and C/I CCM 60% and 20% for Residential HEC participation (deep measures). **[Page 24]**

The Board should direct the Utilities to examine and report at the mid- term review on adding efficiency metrics ($/CCM) to the RA Scorecards. **[Page 24]**

The Board should reject Enbridge's TAF or other target and incentive adjustment mechanism, but consider if an "off-ramp" with suitable trigger criteria could be appropriate. **[Page 25]**

The Board should approve implementation and proposed Budget for the Enbridge 2016/17 Home Energy Conservation Program offers and incentives. **[Page 28]**

The Board direct Enbridge to reduce the 2016 Budget for MHHR Program to $2.5 million and lower the number of 2016 participants. In addition, Enbridge be directed to conduct a charrette with stakeholders, on the results of the 2015 pilot program**. [Page 30]**

The Board require a rigorous independent audit/assessment of Enbridge's Residential Savings By Design Program to be completed for the mid-term review, in order to inform a decision about the future of the program at that time.
[Page 32]

Absent progress on either Legislation to require Home Rating, or demonstrated success from redesigning the program, such as targeting Owners and Home Inspectors, the Home Rating/Labelling program should be discontinued. A decision should be made as part of the mid-term review. **[Page 33]**

The Board should clarify the purpose and accounting rules for the DSMCEIDA account, including whether it applies to Program spending or other budget surpluses etc. and request the necessary Accounting Orders from the Companies. **[Page 35]**

The Board should require Stakeholder Engagement as part of the new governance structure. This would include at least one, preferably two, Stakeholder Annual Meetings similar to those currently held by the Utilities.
[Page 37]

The Board Order the utilities to prepare a benchmarking study to position the historic and current Program Evaluation Costs for Union and Enbridge and, if data are available, other comparable Utilities DSM Programs. **[Page 37]**

Enbridge and Union should Include Community Expansion as a specific case in their Integrated Resource Planning Studies. **[Page 39]**

The Board direct Board Staff, Enbridge and Union to develop a detailed protocol regarding analysis of the Program results for the mid-term review and circulate this to stakeholders for comment, as soon as it is available. **[Page 40]**

(iv) Financial Implications of Recommendations

The Recommendations do not affect the overall Budgets or allocation to the Residential Customer Class (or any other Class).

The changes proposed are not major and involve adjustments to Program Budgets within the envelope proposed for Residential Resource Acquisition (RA) and Market Transformation Energy Management (MTEM) Programs.

1. Guiding Principles and OEB Priorities

1.1 Board Guidelines and Guiding Principles

The Board's Report, highlights goals that ratepayer-funded DSM programs should focus on:

(a) *Assist consumers in managing their energy bills through the reduction of natural gas consumption*.

Customers who participate in the DSM programs should see a decrease in their energy bills.

(b) *Promote energy conservation and energy efficiency to create a culture of conservation*.

DSM programs should advance conservation and energy efficiency beyond the program participants to the broader public in Ontario.

(c) *Avoid costs related to future natural gas infrastructure investment, thus improving the load factor of natural gas systems*.

Gas utilities are expected to utilize Integrated Resource Planning principles and consider DSM initiatives in the context of infrastructure planning to help avoid or defer future infrastructure costs. This is consistent with the government policy of "Conservation First"[1]

With regard to the major issue of balancing DSM Program funding and reasonable costs for non-participants[2]:

> "The Board is centrally concerned with two factors that must be balanced: ensuring the gas utilities have sufficient funding available to pursue all cost-effective natural gas savings in their franchise areas, and that the costs to undertake such efforts are reasonable for those customers who will not participate in a program."

1.2 Minister's Directive: "All cost-effective Natural Gas Savings"

The Minister's Directive has been interpreted by some parties as requiring the Board to direct the Companies to achieve **all** cost-effective DSM Savings.

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[1] Board DSM Report page 17
[2] Ibid

Energy Probe submits there are several important considerations that bear on this interpretation:

- While the Minister's Directive refers to obtaining all cost-effective DSM, it is reasonable to expect that this must occur over several years, weighing rate impacts of DSM (i.e., budgets) against this objective, and approving rates that are just and reasonable.

- This consideration is particularly relevant under the current Incentive Regulation Plans that aim to reduce Enbridge and Union distribution rates below the increase in Gross Domestic Provincial Price Index (GDPPI).

- The Board's DSM Framework provides specific guidance in respect of budgets and the approximate reasonable bill impact on residential ratepayers.

- The Companies indicate the impact of the proposed plans is a bill increase between 2.5 and 3%. This is a Y-Factor pass through incremental to the formula-based increase to base rates under the Enbridge and Union IRM Plans.

- Certain parties do not agree with the Board's determinations concerning rates as set out in the Framework, and seek to re-argue the issue based on speculative analysis and arguments about intangible benefits to customers.

> ….system-wide benefits that accrue to all gas ratepayers, participants and non-participants alike,… are more than a $1 per month *reduction* over the life of the efficiency measures installed. Thus, if a rate impact of $2 per month is still as large as the Board it was comfortable accepting, there is clearly much more room for increase in DSM spending and savings before that level is reached.[3]

Energy Probe agrees with Enbridge regarding hypothetical factors that certain parties argue may put downward pressure on rates:

> The fact is that in at least two important respects, namely carbon and avoided distribution infrastructure costs, the costs have either not yet materialized, as there is no cap and trade system in place, and the distribution infrastructure which GEC relies upon for its hypothetical bill reduction effect is in fact in the ground and generating costs to all ratepayers. Plain and simply, it is one thing to use a ten-year trend line of load-related infrastructure to determine for the purposes of the TRC screening test what infrastructure may have been avoided, and quite another thing to argue that pipe in the ground which generates annual depreciation and return on rate base costs has a downward impact on rates[4].

[3] Exhibit L.GEC.1 Corrected August 12, 2015 p19
[4] AIC Para 127

Energy Probe submits that with some improvements to the DSM Plans, the outcomes from doubling the savings from Enbridge's DSM programs over the next 5 years with reasonable rate impacts, strikes a reasonable balance and is fully responsive to the Ministers Directive regarding achievable cost-effective savings.

1.3 TRC Plus Test and Carbon Costs

In accordance with the Board's Framework, Enbridge (and Union) used the TRC plus Measure/Program/portfolio screening methodology, which includes a 15% non-energy benefits adder. Enbridge demonstrated[5] that the 15% adder is more than 80% of the estimated 2018 carbon price.

Energy Probe agrees with the Companies that until the government policy is clear, treatment of carbon costs is speculative and not an issue affecting the current review and approval of the DSM Plans.[6]

As noted above, Energy Probe urges the Board to reject the position of GEC and Environmental Defense that Carbon cost avoidance is a "tangible benefit" to ratepayers that should be netted out against the costs of DSM programs, thereby supporting a higher Budget/Rate "Cap".

Also, should the Government Include Gas Distribution under a "Cap and Trade" scheme it is likely the costs would be a pass through to all customers.

1.4 Avoided Costs

Mr. Chernick, appearing for GEC, determined that the avoided infrastructure costs which Enbridge should use should be $548 million, more than double the Enbridge/Navigant amount[7]. The Company, stated in evidence that Mr. Chernick's additions were erroneous, as they were not load-related[8].

Accordingly, Energy Probe agrees with the Company's position that its avoided costs[9] should not be adjusted for the purposes of its TRC screening of programs[10].

Energy Probe also submits that until Integrated Resource Planning is required, there is no other basis or need for estimating the "benefit" associated with the avoided costs of new distribution infrastructure.

[5] K5.1 p19
[6] Exhibit K11.2, page 50
[7] Exhibit L.GEC.2, pages 41-42
[8] Tr. 7, pp. 30 -36
[9] Exhibit B/2/5 corrected
[10] AIC para 100

1.5 Bill Impacts

Both Enbridge and Union accept that bill impacts differ for participants and non-participants in the DSM programs.

Enbridge[11]

The total DSM spend allocated to Rate 1 is $28.2 million in 2016 rising to $40.9 million in 2020. This does not include Shareholder Incentives.
The average Rate 1 Residential customer will pay approximately $2.21/month or $26.57 a year in 2020.

Enbridge originally declined to estimate benefit/cost to participants, but In the Hearing EGD provided an estimate of benefit/cost for ***participants*** in the HEC Program based on 415 m3 savings per home[12]. The estimated bill reduction is ~$9.00/mo. compared to paying DSM costs of $2.21/mo.

Union[13]

In 2020, the average Union Rate M1 residential customer will pay approximately $23 per year or $1.92 per month in DSM costs.

The average Rate M1 customer *participatin*g in **Union's** DSM Programs can realize annual volume savings of 65 m^3 in 2020, or a bill reduction of approximately $15 per year or $1.23/mo.

The differences in the Enbridge and Union cost/benefit estimates are significant, but demonstrate that participants directly pay DSM costs but also receive tangible benefits. Non-participants pay DSM costs and *may* receive certain intangible benefits**.**

Recommendation

The Board confirm that $2.00 per month resulting from DSM Program costs is appropriate level of rate impact for a typical Enbridge Residential customer.

1.6 Achievable Potential Study

Enbridge retained Navigant to prepare an Achievable Potential Study[14]
There were major difficulties for stakeholders attempting to compare the Study to the DSM Plan.

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[11] Exhibit B Tab 2 Schedule 4 Table 12; and Undertaking J9.9
[12] Undertaking J6.10
[13] Union Exhibit A, Tab 3, pages 67/68
[14] Exhibit C T1 S1.

In addition, the study methodology was criticised strongly by GEC's expert[15].

> "Enbridge's recent potential study is fraught with so many methodological problems that it has almost no value for informing conclusions regarding achievable savings potential."

Enbridge disagrees with GEC.

> Navigant Consulting provided a thorough response during the oral hearing to one of the key concerns raised by Mr. Neme. Mr. Welch was prepared to address the additional concerns raised by Mr. Neme, but in the interest of time he did not. Mr. Welch's testimony clearly confirmed that Mr. Neme's views in respect of the Potential Study methodology were not correct[16].

After many information requests, Navigant and Enbridge provided Energy Probe with a comparison between the DSM Plan Resource Acquisition Budgets and annual savings, adjusted for free-ridership and the Achievable Potential Study.

Enbridge claims that the AP study and Plan are "close" in terms of Budgets and Savings.

We disagree with Enbridge's claim that the AP study and Plan are "close" in terms of Budgets and Savings.

In fact, the evidence shows that for both the Residential and the Commercial/Industrial Sectors, the Plan does not achieve the Savings forecast by the DSIM Model until 2020 despite higher Budgets[17].

Energy Probe questions the value of the Achievable Potential Study, except to inform the Company on setting targets and budgets. Its direct utility to Stakeholders and the Board is in our submission, minimal.

Energy Probe suggests that the Board also consider the methodology issues identified by Experts and the lack of comparability to the actual Plan as critical flaws that unless corrected, should indicate that despite such studies being required under Section 1.3. of the Framework and are considered best practice, there is in our view minimal value to any party, other than the Company.

Enbridge is planning to Update its 2015 Potential Study and Union is committed to completing an achievable potential study by June 2016. We question the value from more Studies during the term of the Plan.

[15] Exhibit L.GEC.1, Page 22 of 47
[16] AIC para114
[17] JT1.36 Question 7c) Attachment

Union indicates *the results of the study will be used within the mid-term review process to test the directional long-term target, established based on the goals approved in the annual scorecards, to confirm whether any changes are required*[18].

Recommendation:
The Board reconsider the requirement for additional DSM Potential Studies during the DSM Plan Term.

2. DSM Targets and Budgets

2.1 Overall 2015-2016 Targets (Enbridge and Union)

L.OEBStaff.1

Table 2. Enbridge 2016-2020 Budget, Savings, and Cost of Saved Energy by Program

ENBRIDGE 2016-2020 TOTAL					
Program / Sector	**Total Utility Costs ($)**	**% of Total Costs**	**Lifetime Savings (M3)**	**% of Total Savings**	**Cost of Saved Energy ($/M3)**
Resource Acquisition	**212,640,669**	**59%**	**5,008,542,112**	**90%**	**0.0425**
Residential	91,473,258	25%	1,064,112,690	19%	0.0860
C&I	94,111,593	26%	3,944,429,422	71%	0.0239
Overhead	27,055,818	8%			
Market Transformation	**83,135,650**	**23%**	**96,340,405**	**2%**	**0.8629**
Residential	53,969,332	15%			
C&I	18,578,867	5%			
Overhead	10,587,451	3%			
Low Income	**64,930,471**	**18%**	**484,752,590**	**9%**	**0.1339**
Low Income	56,634,483	16%	484,752,590	9%	0.1168
Overhead	8,295,988	2%			
Portfolio Subtotal	**360,706,790**	**95%**	**5,589,635,107**	**100%**	**0.0645**
Other Costs	20,508,892	5%	-		
Portfolio Total	***381,215,682***	***100%***	***5,589,635,107***	***100%***	***0.0682***

Source: (Enbridge Gas Distribution 2015a, Exh. B, Tab 1., Sch. 4, pp. 3-5, 19-21, 27, 29; Exh. B, Tab 2, Sch. 3, pp. 3-7).

Including the 2015 transition year, Enbridge has established a 2015-2020 CCM target of 6,355 million CCM. [6,355,128,342 m3]

In the 2015 Transition year Enbridge's plan is to spend approximately $35 million to save about 1000 CCM (100% Target). However, the Company expects to significantly under-achieve the Target] mainly due to the shift of resources to, and lower unit savings ($/CCM) from, shutting down the Residential Home retrofit program. The Company also proposes a $5 million Incremental Budget to fund initiatives it claims are required by the Board's Guidelines.

[18] Union Exhibit A, Tab 3, Page 16

For the 2016-2020 5 year plans, Enbridge plans to spend $381 million to save approximately 5.6 billion m^3 of gas over the lifetime of measures installed during the five-year plan term. The majority of savings (90%) will come from the Resource Acquisition Program, targeted to provide 5008.5 million CCM. [5,008,542,112 CCM]

However, as discussed below, we submit there is a "balance issue" underlying the largest Resource Acquisition component of the savings.

L.OEBStaff.1

Table 3. Union 2016-2020 Budget, Savings, and Cost of Saved Energy by Program

UNION 2016-2020 TOTAL					
Program / Sector	**Total Utility Costs ($)**	**% of Total Costs**	**Lifetime Savings (M3)**	**% of Total Savings**	**Cost of Saved Energy ($/M3)**
Resource Acquisition	**176,550,000**	**58%**	**5,816,035,539**	**94%**	**0.0304**
Residential	81,032,000	27%	653,283,929	11%	0.1240
C&I Total	95,518,000	32%	5,162,751,610	84%	0.0185
Market Transformation	**1,042,000**	**0.3%**	**-**	**0%**	
Residential	1,042,000	0.3%	-	0%	
Low Income	**66,182,000**	**22%**	**282,123,495**	**5%**	**0.2346**
Low Income	66,182,000	22%	282,123,495	5%	0.2346
Performance Based Total	**4,365,000**	**1.4%**	**60,000,000**	**1%**	**0.0728**
C&I	4,365,000	1.4%	60,000,000	1%	0.0728
Large Volume	**3,985,000**	**1.3%**	**-**	**0%**	
C&I	3,985,000	1.3%	-	0%	
Portfolio Subtotal	**252,124,000**	**83.5%**	**6,158,159,034**	**100%**	**0.0409**
Other Costs	34,803,000	12%	-		
Inflation	14,977,000	5%	-		
Portfolio Total	***301,904,000***	***100%***	***6,158,159,034***	***100%***	***0.0490***

Source: (Union Gas Limited 2015a, Exh. A, Tab 3, pp. 6, 12, 20, 26, 30, 32, 36; Exh. A, Tab 3, App. A, pp. 14-15, 23-24, 41-43, 48-52, 59-60, 62-63, 71, 87-89, 96-98, 105).

Union expects to spend $302 million dollars from 2016 through 2020, with annual spending averaging about $60 million per year, excluding shareholder incentives. The majority of Union's costs are allocated to the Resource Acquisition program (58%). The Resource Acquisition Program is targeted to provide 5.8 billion (94%) out of 6.2 billion lifetime CCM savings.

Although not directly affecting Energy Probe's constituency, a major Issue with Union's Overall Target and achievement of maximum economic savings, is discontinuance of Union's Large Industrial RA Self-Direct Program.

2.2 Enbridge 2015 Resource Acquisition Rollover Targets and Budgets

The major concern about 2015 (apart from the Incremental Budget) is that by applying escalators in keeping with the Board's direction in section 15.1 of the new DSM Framework and using the escalation factors approved in EB-2012-0394 to increase DSM targets from 2013 to 2014, some of the resulting 2015 targets make no sense.

This result is shown, among other places, at Technical Conference response to Energy Probe JT1.EP 36 Attachment Update 2016. Table 1 summarizes that Schedule.

Table 1: Comparison of 2014, 2015 and 2016 Residential Sector 100% Targets and Budgets

Program	2014 Target CCM	*2014 Target Actual CCM*	*2014 Budget Actual $ M*	2015 Target 100% CCM	2015 Target 100% YTD	2015 Budget $ M	2016 Target 100% CCM	2016 Budget $ M
Resource Acquisition	992	*664.4*	16.58	*1011.9*	89.3	16.64	894.4	29.5
Low Income SF	17.7	25.7		24.1			28.9	10.1
Low Income MF	48.5	*29.8*	6.42	*68.7*		6.86	59	
Residential Savings by Design (units)	1000	1059		1111			2500	
Commercial Savings by Design	12	*19*	3.05	18		4.89	30	11.5
Home Labelling	1500	*662*		*4500*			596	

Source: J1.36 EP Attachment Update 2016 (Excel) Tabs 1&2

Stakeholders and Enbridge attempted to reach a "Consensus" on 2015 Targets and Budgets, but this failed for several reasons, including the Board direction regarding Agreements, an impasse on the incremental Budget and lack of time.[19]

This would have avoided rolling over the Scorecards on a formulaic basis resulting in the current, in our view, unreasonable 2015 Targets for some Programs. (Specifically those indicated in **red** text in Table 1).

The overall 2015 RA Target is only 2% higher than 2014, but 52% higher than 2014 actual achievement. Examination reveals the 2014 result is primarily due to the major reallocation of budget and resources from the Commercial/Industrial Sector to the Residential Sector.

For 2015 Enbridge has requested a $5 million Incremental budget. It claims this is a placeholder for initiatives arising from the Guidelines. However, 50% of the Incremental Budget was used to launch the My Home Health Report MTEM behavioural program.

[19] AIC para 35

Importantly, Enbridge states the 2015 Home Energy Conservation (HEC) program had to shut down because of a lack of budget. It states that "The Company has used all of the tools available to it to continue with this successful program by accessing up to 30% from other budgeted areas and the DSMVA[20].

However, at the same time it was transferring 30% of C/I program funds to the HEC Program, as noted above, Enbridge used ~$2.5 million of Incremental Budget funds to launch the My Home Health Record (MHHR) program[21]. Enbridge witnesses indicated some of the other $5 million Incremental Budget funds are underspent.

The MHHR program has not been properly discussed with Stakeholders and there is no Board approval for the 2015 Budget. Since 2015 is almost over, the important implications are the proposed roll out of MHHR in 2016. This is discussed later.

Enbridge also requests that the unspent balance of the Incremental Budget "should be recorded in the DSMVA and carried forward to 2016[22].

In sum, it appears from mid-year data that Enbridge will likely under-achieve its 2015 RA rollover Targets (and its LI MF and MTEM Home Labelling targets). It is also asking that if there is a 2015 DSMVA amount, this be carried forward to 2016 together with unspent Incremental Budget to be recorded in the DSMVA and carried into 2016.

We discuss this carryover request further under Accounting and Deferral Accounts.

2.3 Submission Enbridge 2015 Rollover Targets and Budgets

The Resource Acquisition Programs provide over 90% of the cumulative lifetime savings over the 2015 Transition year and 5 year DSM Plans. That is why the RA Targets, Program Offers are so critical to the goal of meeting the Minister's Direction regarding *achieving all cost-effective DSM savings*.

Non-RA programs have other goals such as to transform the market and educate/motivate end users of gas but provide next to zero short term savings.

The split of the RA Scorecard into Small and Large customer "baskets" planned for 2016 in fact began in 2014 by shifting resources from the C/I sector to Residential, resulting in collateral changes to achieving the 2014 and 2015 RA targets.

[20] AIC para 41
[21] Exhibit BTab1Schedule 3 Page 14.
[22] AIC para 40

The result of the 2014 shift in resources from C/I to Residential was:

- Failure to meet RA targets
- High cost per Residential m3 saved.

It would be expected that 2015 would present a similar picture - more resources reallocated to the Home Energy Conservation Program (HEC) and the RA Target not achieved. However, this is not the only issue. As discussed above, in fact Enbridge has shut down the HEC in 2015 due to availability of funds.

We submit that Enbridge’s actions regarding management of the HEC Program in 2015 are inappropriate and counter to the goals of increasing participation and maintaining the stability of established programs.

The additional Budget to maintain the HEC in 2015 should first have come out of the $5 million Incremental Budget and second by reallocating funds as allowed (30%) from other programs, in order to meet the aggressive RA 100% Target, at which point the 15% DSMVA would have come into play. We may also speculate the high 2015 Rollover target of 1012 million CCM was also a factor in Enbridge’s Decision.

If, as stated by its witnesses in the Hearing, Enbridge will not meet its 2015 100% RA target of 1012 million CCM, then accordingly there is no basis to apply the 15% DSMVA to 2015 or to carry any of the amounts forward.

We suggest that Enbridge made a decision to sacrifice the HEC and other RA programs to retain the Budget for the 2015 OPower MHHR program. As noted above, this is a pilot which had not been reviewed with stakeholders or approved by the Board.

Assuming Enbridge does not achieve its 2015 100% RA target, then it should not be allowed to carryover any surplus funds into 2016. The reason for this is inappropriate management of the 2015 RA Budgets and shut down of the Home Energy Conservation Program and the associated reduction in 2015 savings.

Recommendation
The Board should deny the carryover of any of the 2015 Incremental amount from 2015 to 2016 and direct it to be returned to ratepayers.

The remaining major concern for stakeholders and the Board is the extent that the 2014 and 2015 results have influenced the setting of Enbridge’s 2016-2020 RA targets. The link between historic achievement, yield (CCM/$) and forward year target-setting has been set out in evidence.

2.4 Enbridge Resource Acquisition Targets 2016-20

As noted above, Enbridge RA Targets (100%) level are in the range of 900-1100 million CCM annually over the 2016-2020 5 year DSM Plan.

This is a similar target to the historic levels in 2012-2013, prior to the change to higher emphasis on smaller volume customers and reallocation of resources to the residential home retrofit in 2014/15. However, as the Company acknowledges, achieving a similar level of savings as in the past now is more difficult.

> Large Commercial and Industrial projects which make up a significant portion of the Resource Acquisition CCM target, the Company has experienced a decreasing trend in the CCM achieved in the 2012-2014 period, even though the number of projects are increasing. These savings levels are confirmation of the fact that Enbridge is increasingly pursuing smaller projects.[23]

This reality and the shift of resources to the residential and small C/I sectors, requires an 2016 annual budget increase of 80% from about $16.5 million (2014/15) to $29.5 million (2016). This results in a much lower efficiency and much higher cost/CCM.

Enbridge has also amended the 2016 RA Scorecard:

1. To create two separate RA Metrics- Small Residential Commercial customers and Large Commercial Industrial Customers. The weighting is 40% each;
2. Retain the two Deep Measure Metric with 20% weighting;
3. Create a 150% “stretch target level” for both baskets and Deep Measure Metric.

Enbridge’s rationale for this change is[24]:

> The Board’s direction to pursue all cost-effective DSM and tailor offers to customers with significant barriers to entry (such as small business customers) indicates that smaller consuming markets should be a priority in Enbridge’s 2015 to 2020 DSM Plan, regardless of the fact that they are comparatively less cost-effective than offers directed at large commercial and industrial customers. Providing these markets their own CCM target will cement their importance within the Company’s DSM portfolio.
>
> As a gas utility with a very significant residential customer base, Enbridge believes a robust DSM offer for the residential market is paramount. It does not seem commensurate however, that high levels of effort and spending in this sector should result in a comparatively lower shareholder incentive. Placing greater value on CCM achieved through small consumers will help to maintain focus on this essential market segment.

[23] AIC para. 58

[24] Exhibit B Tab 1 Schedule 4 Page 15 para 14

Comparison-Union 2016-2020 Targets

Exhibit A
Tab 3
Page 12 of 73

Table 3

Union's 2016-2020 Long Term Natural Gas Savings

Long Term Natural Gas Savings Goal (millions of lifetime m³)						
Program	**2016**	**2017**	**2018**	**2019**	**2020**	**Long Term**
Residential	90	120	148	148	148	653
Commercial/Industrial	1,020	1,028	1,038	1,038	1,038	5,163
Low Income	51	53	56	60	61	282
Performance-Based Conservation	0	1	8	18	33	60
Total	**1,161**	**1,203**	**1,249**	**1,264**	**1,280**	**6,158**

Union has established 75%, 100% and 125% performance bands. The Upper Band multiplier of 125% has been established with the consideration that Union has to achieve a 25% increase above the target with additional funding of only 15% above the Board-approved DSM budget as outlined in Section 11.2 of the Guidelines.

Union's overall 2016 RA targets are higher than Enbridge (despite discontinuance of the Large Industrial self-direct program). The Residential Target is slightly lower due to lower participation rates and the Commercial/Industrial significantly higher.

2.2 Submissions RA Scorecards and Targets 2016-2020

Energy Probe endorses Mr. Neme's assessment of the reduction in savings from the Enbridge (and Union) Resource Acquisition programs[25]:

> Greater emphasis on smaller customers – both utilities' propose placing greater emphasis on treating efficiency opportunities from residential and smaller business customers, from which savings are typically more expensive to acquire (though still cost-effective); and
>
> Conservative savings estimates – both utilities appear to use conservative assumptions regarding the savings yields from some of their proposed programs.

Enbridge

With respect to the Enbridge RA Program, we are of the view that with a budget increase of 80% to $29.5 million and even accepting the lower total "yield" (CCM/$) resulting from the residential Home Retrofit Program, the Enbridge 2016 RA targets (100%) are significantly understated.

[25] Exhibit L.GEC.1 Corrected page 3

Enbridge has set the 2016 overall Residential and C/I RA 100% Target at 894.4 million CCM. This is below the average of 2014 and 2015 targets BUT as noted above, with an 80% bigger budget.

The Breakdown of this 2016 overall RA target 894.4 M CCM shows 767.9 M CCM from the C/I sector programs and 102.6 M CCM from Residential[26] while the respective Budgets are approximately $15 and $12 million.[27]

As well as examining 2016 RA Program Targets, we have looked at the declining Efficiency expressed in $/m3 relative to historic 2012-2014 and 2015 estimate. The efficiency of RA program was 21c/m3 in 2015 rising to 33 cents/m3 in 2016. This represents a major decline in efficiency and this decline is across all RA Sectors.[28]

Union's 2016-2020 RA Scorecards are split into Residential and Commercial/Industrial and have slightly lower Residential RA CCM targets and budgets.

If Enbridge's 2016 RA targets are understated as we believe, the combination of this and Enbridge's other proposed changes to the Scorecard could potentially lead to above target (100%) achievement especially with the 15% DSMVA Funds. This is because of several factors that the company may have used to optimize both risk and shareholder incentive. This includes combining Residential with Small Commercial Industrial and lowering the targets for this and the Large C/I "baskets".

Examination of the Enbridge 2016 RA Scorecard shows the lower bound is 25% lower than the mid (100%) but the upper is 50% above. Given Enbridge's statements about "decay" (i.e. lower CCM/$ as targets increase) this supports our view that the 2016 100 % RA target of 894.4 million CCM is too low and should be increased by at least 10 % to ~1000 million CCM.

Energy Probe submits that there are several potential options to mitigate any potential gaming of the RA Scorecard by Enbridge and protect ratepayers from to paying too much for too little savings:

- Return the RA Scorecard back to a single combined RA Target/Scorecard;
- Separate the Residential Sector Metric from the C/I Sector Metric like the Union Scorecard;
- Increase the RA targets by 10% across the board;
- Increase weighting on C/I, and
- Eliminate the 150% stretch target level.

We have asked questions regarding some of these alternatives**.**

[26] Exhibit I T2 EGDI EP 19
[27] Exhibit B Tab1 S4 Table 7

[28] JT 1.36 Attachment EP Update 2016 Tab 1

Recommendation
To protect ratepayers, the Board should order EGD to amend the 2016 RA Scorecard to separate the RA Residential and C/I Metrics, adjust weighting appropriately and reduce the upper 150% target level to 125% of Mid 100% target. These changes align the structure of the Enbridge and Union RA Scorecards and should carry forward into 2017-2020.

In addition, the Board should consider for both Enbridge and Union, the issue of the appropriate balance (Budgets and Targets) between the Residential and Commercial/Industrial RA programs.

In its IR responses Enbridge is clear that if the Scorecard upper bound is reduced to 125%, the maximum incentive for RA should be the same[29].

However if, as we suggest, the 2016 RA Targets are understated, then Enbridge could reach the maximum revised 125% level with the DSMVA funds, but has no incentive to go higher. This, in our view, is counter to achieving maximum economic savings and should be corrected.

Recommendation
The Board should direct Enbridge to increase the 2016 100 % RA target by about 10% to about 1000 million CCM and correspondingly, a revised Upper 125% stretch target. These revisions should be carried forward into 2017-2020.

Union Gas

Based on our limited review, Union's proposed overall RA targets are reasonable.
A major caveat relates to the much higher level of Incentives offered by Union in the Home Retrofit Program in 2016 and the resulting the lower efficiency ($/CCM) of the Program compared to the Enbridge Home Energy Conservation Program. This has to be taken into account when comparing the residential sector targets.

We have noted the discontinuation of Union's Large Volume Customer self-direct program, but have no submission in this regard.

3. Enbridge Shareholder Incentives

The following Table extracted from the Synapse Report summarizes the shareholder incentives for Enbridge.

[29] Exhibit I.T2.EGDI, Energy Probe 26 b)

Resource Acquisition

Shareholder Incentive Achievement					
Max Shareholder Incentive			6,028,149	6,018,665	6,237,051
40% of Max Incentive (100% achieved)			2,411,260	2,407,466	2,494,820
Large Volume Customers	$	40%	964,504	962,986	997,928
Small Volume Customers	$	40%	964,504	962,986	997,928
Residential Deep Savings	$	20%	482,252	481,493	498,964

Low Income

Shareholder Incentive Achievement					
Max Shareholder Incentive			2,070,551	1,871,569	1,834,735
40% of Max Incentive			828,220	748,628	733,894
Single Family Ontario Building Code (Part 9)	$	45%	372,699	336,882	330,252
Multi-residential Ontario Building Code (Part 3)	$	45%	372,699	336,882	330,252
Low Income New Construction	$	10%	82,822	74,863	73,389

Market Transformation

Shareholder Incentive Achievement					
Max Shareholder Incentive			2,351,299	2,559,766	2,378,214
40% of Max Incentive			940,520	1,023,906	951,286
Home Health Report	$	5%	47,026	51,195	47,564
School's Energy Competition	$	5%	47,026	51,195	47,564
Run it Right	$	20%	188,104	204,781	190,257
Comprehensive Energy Management	$	20%	188,104	204,781	190,257
Residential Savings by Design	$	10%	94,052	102,391	95,129
	$	15%	141,078	153,586	142,693
Commercial Savings by Design	$	15%	141,078	153,586	142,693
New Construction Commissioning	$	5%	47,026	51,195	47,564
Home Rating	$	5%	47,026	51,195	47,564

Source: Enbridge Exhibit B Tab1 Schedule 4 (Extracted from Synapse Report)

3.1 Scorecards and Incentives

The Board's Guideline has established the Maximum Shareholder Incentive for Enbridge at $10.5 million for 2016; 40% can be earned at the 100% target level.

For the Resource Acquisition Program, the maximum Incentive is 60% of total, or about $6 million. The majority of the RA Program incentive (80%) is based on achievement of cumulative lifetime gas savings (CCM). The balance is based on participation in the Residential Home Conservation Program. As discussed above, Enbridge has separated the metrics for CCM savings from large and small volume customers. In the past, C&I customers provided the majority of savings.

As we have recommended earlier, the RA Scorecard should be amended/revised to provide separation of the Residential and Small/Large C/I Targets.

Out of the overall 2016 target of 894.4 Million CCM as filed, the Residential Sector component is102.6 Million CCM and the Small/Large C/I sector component 767.9 Million CCM.[30]

We suggest there are two ways to reward Enbridge - increased participation and lifetime cumulative gas savings.

Currently the scorecard weighting provides 40% weight for savings from the small volume customer sector, including residential and 40% weight for savings from the larger C/I customer sector. There is 20% weight for participation in the Home Energy Conservation Program (Deep Measures).

It is recommended that:

Along with directing Enbridge to restructure the RA scorecard, the Board should consider requiring Enbridge to amend the weighting. An appropriate weighting could be Residential CCM 20% and C/I CCM 60% and 20% for Residential Home Energy Conservation participation (deep measures).

To be clear, this recommendation for the Board's consideration is complimentary to and in conjunction with the recommendations regarding RA Scorecard restructuring and a 10% increase of the in the overall 2016 RA Target.

The Residential Sector Market Transformation Incentives are primarily focussed on participants with the exception of the MHHR that includes a small contribution of savings to the RA Target.

3.1.1 Synapse Recommendation

Synapse recommends that The Board should consider requiring the utilities to develop metrics or other mechanisms that focus on program cost-effectiveness. Such a metric would ensure that the utilities keep costs low while achieving significant savings.[31]

As has been noted above, the efficiency ($/CCM) is decreasing for Enbridge's RA programs[32] and therefore Energy Probe supports Synapse's recommendation.

Recommendation
The Board should direct the Utilities to examine and report at the mid- term review on adding efficiency metrics ($/CCM) to the RA Scorecards.

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[30] Exhibit I T2 EGDI EP 19
[31] Synapse Report 6.2.5 -2 Page 102
[32] JT 1.36 Energy Probe attachment 2016 update

3.2 Shareholder Incentive adjustment Mechanisms

Both Enbridge and Union have proposed adjustments to targets and the collateral changes to incentives citing fairness as the basis.

3.2.1 Synapse Recommendation

> The Board should reject both Enbridge's and Union's proposed adjustment mechanisms because the overall five-year savings goal targets that the utilities are required to achieve should not be adjusted during the course of the plan. Such an approach encourages the utilities to reach their initial goals more creatively should evaluation impacts decrease claimed savings for current measures. If evaluation study results reduce the amount of savings the utilities can claim from certain measures, then the utilities will need to investigate new measures, increase marketing for other measures, or implement other strategies that results in greater savings. Therefore, it is important the initial goals (and therefore shareholder incentive targets) established during this planning process are appropriately aggressive to ensure the utilities remain motivated to achieve savings throughout the plan term.

3.2.2 Submission

Energy Probe agrees with Synapse that adjusting targets and incentives and not other elements of the plans, such as budgets during the Plan, is not appropriate. It is not regulatory practice to allow such adjustments under Incentive Regulation Plans and we submit it should not be allowed under multi-year DSM Plans.

However, we suggest that there could be a mechanism equivalent to an IRM off-ramp if external circumstances require material changes to the Plan. This would require suitable trigger criteria. For example, if the utility is unable to attain its RA targets by a certain amount in successive years (with loss of shareholder incentive payments) this could be an appropriate trigger for a review.

Recommendation
The Board should reject Enbridge's TAF or other target and incentive adjustment mechanism, but consider if an "off-ramp" with suitable trigger criteria could be appropriate.

4. Program Types

Since the costs of Enbridge's Residential Programs/Offers, Programs are largely allocated to the Residential Customer Class, these are Energy Probe's primary Interest:- ***Home Energy Conservation; Residential Savings by Design; Behavioural- My Home Health Record and Home Energy Rating/Labelling.***

Residential customers are also allocated a significant proportion of the costs of Low Income Programs.

4.1 Resource Acquisition Programs

4.1.1 Enbridge Home Energy Conservation (HEC) Program

As noted earlier, there are significant issues regarding Enbridge's 2016 Residential Targets and Budgets. Further, we have noted for both Enbridge and Union, some issues to be considered related to balancing the appropriate allocation of resources between the Residential and Commercial/Industrial Resource Acquisition Programs.

With these caveats, Energy Probe has considered if the Enbridge HEC Program Design/Offer- eligibility, measures, incentives, participation levels, marketing and evaluation are reasonable and has also compared these to the Union Home Retrofit Program.

The significant differences in the Enbridge and Union Programs include the much lower participation rates and the (new) higher level of incentives for Union.

Comparison-Union Home Retrofit Program

Starting in 2016, Union intends to add a "bonus rebate" of $250 for each measure installed beyond the first two, to encourage homeowners to pursue all energy savings opportunities. Starting in 2016, Union will increase the maximum rebate payment from $2,500 to $5,000. The cost of the assessment, measure rebates, and bonus rebates will count toward this cap. Exhibit A, Tab 3, Appendix A, Page 6.

Table 2 Comparison of Enbridge & Union Home Conservation/Retrofit Programs

	Enbridge	**Union**
2016 Budget	**$12.2 million**	**$7.2 million**
2016 Participants (rate%)	**7500 (4%)**	**3000 (2.5%)**
2016 Average Cost /home	**$1627**	**$2400**
2016 CCM	**102.62M***	**77.95M**
2016 CCM/home	**1368**	**2598**
2016 CCM/$	**8.41**	**10.8**

Sources
Enbridge Exhibit BTab1 Schedule 4 Tables1 and 8
Union Exhibit A Tab 3Appendix A Tables 1-6
***I.T2.EGDI.EP.19**

The comparison of the two programs shows that with the higher incentives offered by Union, the forecast result is higher savings per home, but at a higher cost /CCM than Enbridge. Yield (CCM/$) is an important consideration, but also are the lifetime savings (CCM) per home and from the Program in total.

Accordingly, there appear to be material trade-offs between participation rates and increasing incentives/rebates.

4.1.1.1 Synapse Recommendations on Enbridge HEC Program

Synapse has made several Recommendations regarding the design and incentive structure of the Enbridge Home Energy Conservation Program.[33] These include:

1. Drop the two deep measure requirement (also applicable to Union)
3. Increase incentive cap up to $5000 (consistent with Union)
4&5 Change tiered incentive structure
8. Increase number of products/measures offered

In the Hearing and Undertaking Responses both GEC's Expert and the Company rejected dropping the 2 Deep Measure provision which Synapse indicated was aimed at getting higher participation rates.

Synapse supported Union's higher Incentives and indicated that it would also increase participation rates. Union's evidence also indicated this. This also increases Budget.

Enbridge countered to Synapse's recommendation regarding incentives that the demand for the Enbridge HEC program was high and providing higher incentives was unnecessary and would have a significant impact on Budget/Spend.

Changing the current Enbridge HEC incentive structure ($1,100 for reaching 15%-49% annual gas Savings and $1,600 for reaching 50% and above in annual gas savings) was also rejected by Enbridge.

Comparison- Union

Union has a more detailed Measure Rebate menu with higher rebates in 2016 than in the past for most measures.[34]

Union still offers ESKs primarily as part of its residential DSM marketing. Enbridge believes that they are appropriate only as part of the offer under the HEC program.

[33] Synapse Report Recommendations 5.3.2 Appendix A3
[34] Exhibit A, Tab 3, Appendix A, Table 1

4.1.1.2 Submission Enbridge Home Energy Conservation Program

This submission deals only with the Enbridge Residential Program offers.

As noted above, we do not accept the 2016 Enbridge Resource Acquisition Scorecard and Targets and have recommended it be amended.

The Experts and Company do not agree on some of the Enbridge Residential Program design, offers and incentives.

This leaves stakeholders and the Board with two options:

- Accept the Companies' position, or
- Substitute one of the alternative opinions based on the Guiding Principles, economic and rate considerations.

On balance, given the mid-term review, Energy Probe recommends:

The Board should approve implementation and proposed Budget for the Enbridge 2016/17 Home Energy Conservation Program offers and incentives.

However, we submit it is critical that appropriate Program performance data be recorded and analysed to fully inform the Mid-term Review, even if results are not fully audited.

That information should include:

Changes in participation rates relative to 2014/15 and 2016/17 forecast; cost /home; annual savings /home; CCM/home; CCM/$ and Scorecard performance Metrics; Participant satisfaction survey.

A similar requirement would apply to Union.

4.2 Market Transformation Programs

4.2.1 Behavioural HER Programs: My Home Health Report Program

Enbridge commenced the MHHR Program with OPower in 2015 with a budget of $2.7 million, using Incremental Budget funds.

Enbridge claims the MHHR offer provides customers with better information on their energy use in addition to personalized energy saving advice. The MHHR offer motivates customers to use measurably less energy and, all else being equal, save money on their monthly energy bills.[35]

Enbridge's MHHR offer is designed with the following characteristics:

1. Delivery of reports;
2. Delivery of web portal;
3. Ability to opt-out.

Enbridge rolled the offer to 500,000 customers in 2015, and proposes expanding the offer to 1,000,000 customers in 2016. The 1,000,000 participants will be targeted based on the following composition:

- Group 1: 775,000 – highest consumption non-ebill participants
- Group 2: 225,000 – highest consumption ebill participants

The MHHR Program Budget is $3.6 million in 2016, doubling to $7.2 million in 2020.

Although primarily an MTEM Program, EGD is estimating collateral savings.
[19.5 million CCM in 2016, rising somewhat in 2017 and dropping to 14.3 million CCM in 2020]

We have significant concerns about the cost/benefit of the MMHR Program, and Enbridge's reliance on OPower:

- Enbridge is paying up to $4 million a year in licencing fees to Opower that controls the program delivery and results. J8.9;
- Through its internal analysis, Opower has found that across 60 waves with 11 utilities, households are approximately 10% more likely to participate in other utility-run EE programs after receiving Opower's reports. J8.9;
- Enbridge could achieve an "uplift" for participation in the Home Energy Conservation program by other channels;
- The Green Button initiative will provide additional consumption data to electricity and gas consumers in Ontario;
- A claimed TRC screening ratio of 1.2 does not justify the MHHR expenditure, compared to the more cost-effective Home Energy Conservation Program;
- The results of the 2015 pilot program involving 500,000 participants have not been reviewed with stakeholders or Board Staff.

4.2.1.1 Synapse Recommendations

Synapse made 6 Recommendations regarding the MHHR program.[36]

[35] Exhibit B, Tab 2, Schedule 1, Page 69
[36] Exhibit LOEB Staff.1 Synapse Report Recommendations 5.6.3

These include Recommendation 5.6.3 #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.

Other Synapse recommendations relate to post evaluation and a review of materials and reporting.

Enbridge's response

> Enbridge has provided detailed pricing information. Postal rates in Canada are higher than in the US, and OPower has given us permission to state that EGD has achieved its lowest ever data analytics cost per customer due to the scale at which we are proposing to roll out the offer.[37]

The Contract Pricing is not on record, but this statement implies that under the OPower Agreement, if the volume is reduced, the unit cost will increase.

4.2.1.2 Submission My Home Health Report

Having considered the MHHR offer in some detail, Energy Probe requests the Board to require Enbridge to proceed in a careful step wise manner that includes a detailed review of 2015 pilot program results and a slower phased rollout of the Program.

Recommendation MHHR Program:

The Board direct Enbridge to reduce the 2016 Budget for MHHR Program to $2.5 million and lower the number of 2016 participants. In addition, Enbridge be directed to conduct a charrette with stakeholders, on the results of the 2015 pilot program.

Comparison-Union

Union will also launch a similar Behavioural Offering in late 2016.[38] This offering also seeks to achieve natural gas savings by encouraging customers to change energy use decisions and actions. As well, Union indicates the offering will produce benefits for other offerings by acting as a channel to promote the adoption of energy efficient measures and drive participation in Home Reno Rebate and ESKs.

[37] Undertaking J5.3
[38] Union Exhibit Tab 3, Appendix A

4.2.2 Savings By Design MTEM Program

Enbridge

The Savings by Design ("SBD") Residential offer is to use the Integrated Design Process ("IDP") to demonstrate to builders the potential for achieving higher levels of energy and environmental performance through the application of alternative design approaches. This will be supported with performance incentives that encourage builders to build new homes that are 25% better than homes built to Ontario Building Code ("OBC") standards.

SBD incentives are a Fixed incentive of $25,000 per builder for IDP plus an Incentive of $2,000 per home for first 50 homes for OBC > 25%; ODP (2) $1,000/home for next 100 homes and ODP (3) $500/home for 200 homes.

The 2016 Budget is $3.25 million, rising slightly to 3.4 million in 2020.

Scorecard 2016	Wt	75%	100%	150%
Builder Enrolments	10%	23	30	45
Homes Built	15%	1,875	2,501	3,751

Comparison-Union

Union has a similar Savings By Design Program and is proposing to discontinue this post the OBC change in 2017 [39].

4.2.2.1 Synapse Recommendations[40]

Synapse has 5 recommendations including expanding marketing to other decision makers in the new Single family home market and restructuring the incentive to reduce the number of homes for each tier of incentive.

4.2.2.2 Submission Savings By Design Program

We have concerns about the SBD Program:

- the watershed resulting from the 2017 changes to the OBC and a new 15% above 2017 code requirement (equivalent to Energy Star);

[39] Union Exhibit A, Tab 3, Table 6

[40] Synapse Report Appendix A3 Recommendation 5.6.2

- homes started prior to the OBC change in order to get the incentive, but not completed till after the Code change;
- as recommended by Synapse, the incentive should be amended to a lower number of homes in the second tier and third tiers (e.g. 50 each) especially given the short time horizon to January 1, 2017;
- The Operation of the DSMIDA and tracking systems to ensure no gaming prior to or after the January 2017 OBC change.

It is recommended that;

The Board require a rigorous independent audit/assessment of Enbridge's Residential Savings By Design Program to be completed for the mid-term review, in order to inform a decision about the future of the program at that time.

4.2.3 Home Energy Rating/Labelling

The 2016-2020 annual Budget is $1.1 million, based on an Energy Audit Incentive of $395.50 ($350+hst).

Enbridge indicates that in 2016 it will continue to lead the market in understanding the value of a home energy rating, with the end goal of encouraging mandatory labelling.

Enbridge will focus on customers buying and selling homes, as the energy audit experience provides the knowledge and understanding which can in turn drive behaviour changes and data-driven decision-making.

Scorecard 2016		**75%**	**100%**	**150%**
Ratings Complete	**5%**	**447**	**596**	**894**

Concerns about the Program include:

- **absence of Legislation requiring Home Rating;**
- **the very low penetration of Home Rating compared to home inspections.**

Even Enbridge has concerns:

> Enbridge is concerned that the program as currently designed is not focused enough on its core objective, which is to increase the number of homes in the market with an energy rating and further encourage the active use of those ratings in evaluating the value of a home. It was originally thought that working through the realtor community this objective could be accomplished. However, Enbridge has found that this is not the case. Enbridge still believes in the core objective of this offer however, and is now proposing a different design to

accomplish it. As a result, Enbridge does not see that there is an alternative metric for the number of realtors with listings enrolled.[41]

4.2.3.1 Synapse Recommendations

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.

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.[42]

4.2.4 Submission Home Energy Rating/Labelling

It appears that both the Enbridge and Synapse agree something needs to be done.

In exchanges with the Enbridge Witness Panel, we suggested linking the Rating to Home Inspection.[43]

Recommendation
Absent progress on either Legislation to require Home Rating or demonstrated success from redesigning the program, such as targeting Owners and Home Inspectors, the Home Rating/Labelling program should be discontinued. A decision should be made as part of the mid-term review.

5. Enbridge DSM Accounting and Deferral Accounts

Existing DSM Deferral Accounts:- the LRAMVA, DSMIDA, and the Carbon Dioxide Offset Credit Deferral Accounts and methodologies will continue under the 2015-2020 Plans.

Changes to the DSMVA and 3 New Accounts are proposed.[44]

5.1 Modification of the DSMVA

Enbridge is proposing a revision to the 2015 DSMVA.

[41] Exhibit I.T5.EGDI.Energy Probe.24 c)
[42] Synapse Report Appendix A3 Recommendation 5.6.4
[43] Tr. Vol 8 page 29
[44] Exhibit B, Tab 1, Schedule 6

The proposal is to record amounts from the 2015 Incremental Budget that are not spent in 2015 to be recorded in the 2015 DSMVA and used for “similar purposes” in 2016.

5.1.1 Submission

Energy Probe disagrees with Enbridge’s proposal:

In our view, the DSMVA is an account approved to record and recover from ratepayers, funds used to achieve *incrementa*l Resource Acquisition targets and lifetime savings in the test year. It is not appropriate to record in the DSMVA, the surplus Incremental Budget funds that are not aimed at achieving savings. This moves away from this objective and does not fit with the DSMVA Accounting Order.

5.2 Cost-Efficiency Incentive Deferral Account (DSMCEIDA)

From a reading of the Board’s Guidelines (page 24) and testimony at the Hearing, the DSMCEIDA is to operate similar to a rolling DSMVA (with or without the 100% target achievement stipulation is a question). For example, surplus funds recorded in 2015 should be applied to achieving the 2016 targets and savings, in conjunction with any funds recorded in the 2016 DSMVA (which are only available when the 2016 100% target is achieved).

Enbridge provides its interpretation in its Argument in Chief:

> The Company is proposing a Cost Efficiency Incentive Deferral Account (DSMCEIDA) which will record any remaining budget in respect of programs that achieve 100% target. These monies, consistent with the Framework at page 24, will then be rolled forward and used in the following year for the purposes of achieving results in that year. The monies carried forward would be in addition to the approved budget level for the following year and would enable the gas utilities to work toward achieving the following year’s annual target.[45]

Accordingly, if the Board agrees with this interpretation of the purpose and objective of the (“DSMCEIDA”), the surplus 2015 Incremental Budget funds, even though they do not originate as program funds, could be recorded in that account and as Enbridge has requested, used to reduce program costs in 2016.

[45] AIC para116

5.2.1 Submission

Energy Probe disagrees with Enbridge's proposed rollover of Incremental Budget surplus and urges the Board direct that any 2015 Incremental Budget surplus be returned to ratepayers.

Stakeholders have attempted to clarify the operation of the DSMCEIDA.[46] It would be helpful for the Board to provide clear direction on this.

It is recommended that

The Board should clarify the purpose and accounting rules for the DSMCEIDA account, including whether it applies to Program spending or other budget surpluses etc. and request the necessary Accounting Orders from the Companies.

5.3 DSM Participant Incentive Deferral Account ("DSMPIDA")

Energy Probe's concern is that out of period costs are being put into rates, especially given the changes occurring to the Residential Savings by Design Program.

<u>We expect that the Company will address this issue in its Reply Argument.</u>

5.4 DSM IT Capital Spending Variance Account ("DSMITCSVA")

Enbridge proposes a new DSM Information Technology Capital spending Variance Account. This account will record the difference between the amounts included in Enbridge's DSM budget for IT Capital Spending in each of the years 2016 through 2020 (which is $1 million per year) and the amounts actually spent upgrading the DSM IT system, for <u>which the costs are anticipated to be mostly incurred in 2015 and 2016.</u>

The estimated cost is approximately $5 million.

Enbridge claims that during its recent Custom IR application, it was made clear to the Board that the capital budget for Enbridge's IT systems did not include any amounts for the DSM IT System.

The company justifies the Capital expense because Board's current DSM Framework imposes new and additional requirements on the Company that were not known, and could not reasonably have been known, by Enbridge at the time the Incentive Regulation application was heard by the Board.

[46] Union Undertaking J2.5 and Enbridge Undertaking J 5.6.

In the Company's view, all costs related to DSM, whether they are capital or O&M, were, and are, expected to be treated as pass-through costs outside of the other cost parameters governing the Company's Incentive Regulation Plan. Enbridge claims it has always been the Company's intention to apply for DSM related costs in a separate proceeding from the Customized IR application.[47]
EGD was asked why, if the IT Upgrade was so urgent why this wouldn't be started in 2015 and some of the $5 million incremental 2015 Budget be used to finance it?

> The DSM IT System will be designed to support the Company's DSM programs over the coming five years covered by the DSM Framework. It would not be appropriate to reduce the scale or scope of the Company's DSM programs in 2015 and 2016 or defer them to a later time to accommodate the cost of putting this system in place in these years given that the new DSM IT System will be used and useful over the balance of the life of the DSM framework.[48]

The Company also responded it does not anticipate any cost implications for its CIS as a result of the implementation of the new DSM IT System.

With respect to On-Bill financing, the Company confirmed that the CIS includes this functionality today.[49]

5.4.1 Submission

There are three issues regarding the DSMITCSVA to be addressed and it is hoped the Company will address these in Reply Argument:

1. Should the IT Upgrade be treated as a Z factor under the IRM Plan (falls below Threshold)?

2. Should the IT Project have been advanced and started in 2015 using the Incremental Budget which EGD now indicates may not be used in 2015 and requests in part be Carried forward to 2016?

3. There is no provision for On-Bill Financing beyond the current CIS capability and until the requirements are known better, whether there will be incremental requirements and cost.

[47] Exhibit I.T10.EGDI.STAFF.29 Part c)
[48] Exhibit I.T10.EGDI.Energy Probe.12
[49] AIC para 119

6. Program Evaluation

On August 21, 2015, the Board issued a letter setting out the DSM evaluation governance structure that will be in place for the purposes of the DSM Plans. DSM program evaluations will be overseen by the Board and will involve the retention of a third party evaluation contractor. The Board will look to a new evaluation advisory committee to provide input and advice to the Board on the evaluation and audit of DSM results. In short, DSM program impact evaluations will be undertaken pursuant to this new governance structure.

6.1 Synapse Recommendations

Synapse made a number of recommendations in respect of process evaluations in its report (Exhibit L.OEB Staff.1,Appendix A, pp.A1-A3).

These recommendations will inform the new Program Evaluation process and procedure.

6.2 Submission

The Board should require Stakeholder Engagement as part of the new governance structure. This would include at least one, preferably two, Stakeholder Annual Meetings similar to those currently held by the Utilities.

If this is not done, the level of information and understanding between the Utilities and Stakeholders will be a serious deficiency that will impact on the efficiency of the mid-term review.

The other major concern of ratepayers is that the new structure and evaluation process will cost more to implement and administer.

Accordingly, Energy Probe requests that:

The Board Order the utilities to prepare a benchmarking study to position the historic and current Program Evaluation Costs for Union and Enbridge and, if data are available, other comparable Utilities DSM Programs.

This benchmark will allow comparison of Evaluation costs prior to 2016 and after.

7. On-Bill Financing

On-Bill financing has been raised by several parties.

Union states there is no customer demand for utility financing.

Enbridge lists several of the Issues to be addressed (again):[50]

- Equity-the appropriateness of the Utilities using shareholder or ratepayer monies to offer low or no interest loans to certain ratepayers.
- Market Reaction-push back from financial institutions and HVAC entities which are currently
  in the market or who wish to enter the market.
- OBA Agreement-reached with stakeholders and which was approved by the Board.
- Existing customer commercial arrangements – may not be compatible with Enbridge, entering the financing market

7.1 Synapse Recommendations

Synapse agrees with further examination of both customer financing and third party on-bill financing:

1. Identify a third party to establish and lead a finance working group. The purpose of this group is to:
    a. research how well existing financing offerings meet the needs of customers in each program;
    b. identify opportunities to design new offerings, targeted to specific programs and customers within these programs;
    c. identify additional sources of financing, including third-party and ratepayer funds; and
    d. discuss the value of financing for specific types of customers, such as low income and Aboriginal groups.

7.2 Submission

Energy Probe does not support utility financing programs for DSM, but is supportive of Union and Enbridge providing access to the Utility Bill by third party service providers under similar conditions in place currently, including compensation of ratepayers for the use of the CIS and protecting ratepayers from bad debt risk.

[50] AIC. Para 119/120

8. Integrated Resource Planning

Distribution planning is concerned with maintaining the safety and integrity of the distribution system under all conditions, including the situation of maximum use/peak demand. Distribution planning looks at peak hour requirements in each network and subnetwork of the distribution system based on the history of individual customer usage in that network and design day conditions.
The IRP Study will examine the impacts of DSM on peak hour demand in the distribution system.
Enbridge is proposing that it undertake case studies in its franchise areas with respect to potential impacts on subdivision planning and deferral of reinforcement projects.[51]

8.1 Submission

The IRP study[52] is a response to the Ministers Letter. However as Enbridge indicates there are similarities to Electricity System Planning but, as Enbridge notes, there are also major differences.

One area of potential conflict with IRP is the direction of the Government to expand natural gas Infrastructure to communities that do not meet the Economic Feasibility requirements under the E.B.O. 188 Guidelines. Union Gas currently has an application before the Board.[53]

Enbridge and Union should address in Reply how this government direction on community expansion fits/does not fit with the second and third objectives of Enbridge's the study

> 2. DSM opportunities in new subdivisions and potential alternative infrastructure plans.
>
> 3. Targeted DSM to achieve active deferral of infrastructure reinforcement projects.

Recommendation

Enbridge and Union should Include Community Expansion as a specific case in their Integrated Resource Planning Studies

[51] AIC para 108
[52] Exhibit C, Tab 1, Schedule 3
[53] EB-2015-0179

9. Mid-Term Review

The Minister of Energy has required that The Board's DSM Framework and the Gas DSM Programs be subject to a mid-term review by June 1, 2018.
The Utilities have indicated that to be completed on time, the review should be commenced by no later than the third quarter of 2017.
As required by the Framework, the mid-term review would include the completed IRP Study]; the Potential Study which is being conducted, as required by the Minister in the letter to the Board dated February 4, 2015. This is to include such potential DSM benefits as Carbon Emissions reduction and Distribution Related Price Effects (DRIPE) may be used to screen prospective DSM programs and inform future budgets.

As part of its Decision, we submit that the Board should explicitly set out the breadth of the mid-term review, including the budgets and targets currently proposed for 2019 and 2020.
Enbridge does not believe it necessary to revisit certain areas set out the Response, or that there will not be significant reductions in budget levels including the scorecard design and metrics:

> "the mid-term review should not re-open a debate on whether or how to establish a balanced scorecard. The Board has already asked for a balanced scorecard as part of its Framework direction."[54]

9.1 Submission.

At a high level, the mid-term review should determine if Enbridge's Plan is "on target" and specifically if the proposed (or revised per Board Decision) Scorecards are appropriate, as indicated by the results for 2016 and 2017 (Year to date).

We have suggested at a Program level the areas that should be included for review/assessment of the Home Energy Conservation Program, including changes in participation rates relative to 2014/15 and 2016/17 forecast; cost /home; annual savings /home; CCM/home; CCM/$ and Scorecard performance Metrics; Participant satisfaction survey. For other Programs e.g. Market Transformation, similar performance metrics should be provided.

This creates a significant challenge regarding collecting and analysing the relevant data to a reasonable level of accuracy for the Review.

It is recommended that the Board direct Board Staff, Enbridge and Union to develop a detailed protocol regarding analysis of the Program results for the mid-term review and circulate this to stakeholders for comment as soon as it is available.

[54] Undertaking J6.2,

We disagree with Enbridge that Scorecard metrics (either as filed or revised) should not be revisited, If they are not working for either ratepayers or shareholder within a reasonable level of tolerance, they should be revisited in the review.

With regard to the format of the Review, direction should be provided first, in the Board's Decision on these Applications and then closer to the time following the first year reporting.

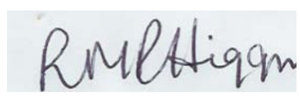
Stakeholders request direction on Procedure including, an Issues List, Evidence, Technical Conference and Oral hearing followed by Written Submissions.

10. Costs

Energy Probe submits it has conducted its intervention in the Enbridge EB-2015-0049 Application in an efficient manner. It has complied with the Board's Procedural Orders and met its time estimates provided to Board Staff during the oral hearing, Accordingly, Energy Probe requests an award of 100% of its legitimately Incurred costs.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

October 2, 2015



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