

# Ontario Energy Board Commission de l'énergie de l'Ontario

# **DECISION AND ORDER**

## EB-2015-0029 / EB-2015-0049

# UNION GAS LIMITED AND

# **ENBRIDGE GAS DISTRIBUTION INC.**

Applications for approval of 2015-2020 demand side management plans.

BEFORE: Christine Long Presiding Member

> Allison Duff Member

Susan Frank Member

Wednesday January 20, 2016

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## 1 INTRODUCTION AND SUMMARY

Together Union Gas Limited (Union) and Enbridge Gas Distribution Inc. (Enbridge) serve close to 3.5 million natural gas customers throughout Ontario. The Ontario Energy Board (the OEB) indicated, as part of the Demand Side Management (DSM) Framework, that natural gas utilities should prepare formal multi-year plans to help natural gas customers access programs to conserve energy.

Union and Enbridge filed separate applications with the OEB for approval of natural gas conservation and energy efficiency programs to be delivered to customers between 2015 and 2020 (Applications). The proposed DSM programs target all customer types (residential - including low-income, commercial and industrial). For each program, Union and Enbridge provided program details, participant eligibility criteria, proposed annual budgets, target metrics and shareholder incentives.

Union and Enbridge have applied to recover the following annual budget amounts:

Proposed	Proposed Annual DSM Budgets														
Utility		2014		2015		2016		2017		2018		2019		2020	2015-2020 Total
Enbridge	\$	32,158,764	\$	37,722,230	\$	63,535,727	\$	73,826,882	\$	79,680,131	\$	81,273,733	\$	82,899,208	\$ 418,937,911
Union	\$	32,049,450	\$	33,988,000	\$	57,254,000	\$	56,049,000	\$	61,424,000	\$	62,464,000	\$	64,714,000	\$ 335,893,000
Total	\$	64,208,214	\$	71,710,230	\$ 1	20,789,727	\$	129,875,882	\$	141,104,131	\$	143,737,733	\$	147,613,208	\$ 754,830,911
Note: Tota	ls e	volude the m	avin	num annual s	hare	holder incen	tive	of \$10 45 mil	lion	/ utility / vear					

Totals exclude the maximum annual shareholder incentive of \$10.45 million / utility / year.

The OEB considered the evidence filed by Union, Enbridge and expert witnesses. The OEB considered the submissions of stakeholder representatives, including those who represent various customer groups and environmental interests, as well as OEB Staff.

The OEB approves the following DSM budgets for 2015 to 2020 subject to the programspecific decisions provided in Section 5 of the Decision.

Approved Annual DSM Budgets											
Utility	2014 (Actuals)	2015	2016	2017	2018	2019	2020	2015-2020 Total			
Enbridge	\$ 32,511,266	\$ 37,722,230	\$ 56,361,117	\$ 62,933,844	\$ 67,554,087	\$ 66,421,773	\$ 67,757,376	\$ 358,750,427			
Union	\$ 33,713,172	\$ 33,988,000	\$ 56,821,373	\$ 58,570,073	\$ 63,272,305	\$ 63,268,773	\$ 64,349,541	\$ 340,270,066			
Total	\$ 66,224,438	\$ 71,710,230	\$ 113,182,490	\$ 121,503,917	\$ 130,826,393	\$ 129,690,546	\$ 132,106,917	\$ 699,020,493			

Notes:

2014 budgets are actuals while 2015-2020 are approved.

Excludes the maximum annual shareholder incentive of \$10.45 million / utility / year.

The approved DSM budgets will be recovered from Union and Enbridge's customers through distribution rates. Some proposed program budgets are approved as proposed. There are programs that were rejected or reduced resulting in a decrease in the budget. Finally, there were also programs that were expanded or introduced to the utility that

resulted in an increase to the budget. The net approved budget is in the table above. Detailed tables are included in the Appendices of the Decision that show all programs and the approved annual budgets, target metrics and allocation of shareholder incentives.

The objective of the DSM Framework was to provide a significant financial increase to allow the gas utilities to expand their programs, allow broader participation and achieve greater natural gas savings. The DSM Framework also considered the costs to customers to deliver these programs. The approved budgets are consistent with the targeted cost outlined in the DSM Framework of approximately \$2.00/month for a typical residential customer.

## 2 THE PROCESS

The OEB was aided by the participation of 18 parties who represented different groups of customers affected by the Applications:

- Association of Power Producers of Ontario (APPrO)
- Building Owners and Managers Association (BOMA)
- Canadian Manufacturers & Exporters (CME)
- Consumers Council of Canada (CCC)
- Energy Probe Research Foundation (Energy Probe)
- Environmental Defence (ED)
- Federation of Rental-housing Providers of Ontario (FRPO)
- Green Energy Coalition (GEC)
- Industrial Gas Users Association (IGUA)
- London Property Management Association (LPMA)
- Low-Income Energy Network (LIEN)
- Ontario Greenhouse Vegetable Growers (OGVG)
- Ontario Sustainable Energy Association (OSEA)
- School Energy Coalition (SEC)
- Shell Energy North America (Canada) Inc.
- The Corporation of the City of Kitchener
- TransAlta Energy Corporation (TransAlta)
- Vulnerable Energy Consumers Coalition (VECC)

These parties are collectively referred to as the intervenors. OEB Staff also participated in the proceeding.

The OEB provided parties the opportunity to ask Enbridge and Union questions about their evidence in writing through interrogatories, and in person at a technical conference.

Some parties filed expert evidence. GEC filed two expert reports, one prepared by Mr. Neme of Energy Futures Group and the other prepared by Mr. Chernick of Resource Insight Inc. Both Mr. Neme and Mr. Chernick provided expert testimony during the oral hearing. OSEA filed expert evidence from Mr. Young of Stoked Power Generation who also provided expert testimony. OEB Staff retained Synapse Energy Economics Inc. (Synapse). Mr. Woolf of Synapse filed expert evidence and provided expert testimony. The OEB held an oral hearing, followed by written argument and reply submissions. The daily transcripts of the oral hearing, the evidence and written arguments are on the OEB's website www.ontarioenergyboard.ca under files number EB-2015-0029 and EB-2015-0049.

During the proceeding, several parties offered suggestions as to how to expand or change the proposed DSM programs. Some of these suggestions are summarized in the program-specific comments of the Decision. Further, parties made numerous submissions related to other aspects of the Applications. While the OEB has considered all the suggestions and submissions, only some are specifically referenced in the Decision.

At times, the OEB has directed the utility to expand or continue a program; however, the OEB has not explicitly responded to every program suggestion made by parties. The OEB encourages the gas utilities to review the various improvement opportunities identified by intervenors and OEB Staff and seek to make their programs as effective and efficient as possible.

## 2.1 Appendices

The OEB's review of the gas utilities' proposed programs has resulted in some changes to program budgets, target metrics and the allocation of shareholder incentives. The Appendices to the Decision provide a detailed summary of all OEB approvals.

To ensure the findings made throughout the Decision are accurately integrated, Union and Enbridge will be provided with the opportunity to review the Appendices to confirm all calculations related to targets and the allocation of shareholder incentives that result from the approved budgets. The approved budgets are final. The gas utilities should review the Appendices to identify any data entry or mechanical adjustments related to targets or shareholder incentive allocation for numerical consistency. There will be no opportunity for intervenors to comment.

## **3 STRUCTURE OF THE DECISION**

The OEB has approved annual DSM budgets for the 2015 to 2020 period with modifications outlined in the Decision.

The OEB has organized the Decision into chapters, aligned with the approved topics list. Each chapter covers the OEB's findings and the reasons for approving or denying certain aspects of the Applications.

The initial chapter provides a brief history of the DSM Framework and its main components.

Subsequent chapters deal with the proposed DSM programs, as well as the annual budgets, target metrics and shareholder incentives related to those programs.

Throughout the Decision, the OEB has indicated areas where further development and information is required and the items the OEB expects to consider at the mid-term review in 2018.

## 4 GUIDING PRINCIPLES AND OEB PRIORITIES 4.1 Background

As part of the provincial government's 2013 Long Term Energy Plan (LTEP), DSM was identified as being an important contributor to the overall goals of implementing a conservation first policy in Ontario. On March 31, 2014, the Minister of Energy issued a directive to the OEB instructing the OEB to develop a new framework for natural gas DSM. Within the DSM Directive, the Minister directed that the OEB have regard to a number of objectives, including that the DSM Framework enable the achievement of all cost-effective DSM and more closely align DSM efforts with electricity Conservation and Demand Management (CDM) efforts, as far as is appropriate and reasonable having regard to the respective characteristics of the natural gas and electricity sectors.

In response to the DSM Directive, the OEB initiated a process in 2014 to develop a new DSM Framework. Throughout 2014, OEB Staff and a group of stakeholders worked together to develop recommendations related to key priorities and guiding principles for the OEB to consider as part of the new DSM Framework. The OEB sought comments from the public on a draft version of the DSM Framework in September 2014, made revisions and updates to the DSM Framework and issued a final version in December 2014.

The current DSM Framework follows the previous DSM Guidelines (EB-2008-0346) which were in place from June 2011. Those guidelines informed the development of new multi-year DSM plans for both gas utilities for the period 2012 to 2014. Prior to the 2012 DSM Guidelines, the gas utilities were guided by the OEB's Decision in the Generic DSM Proceeding in 2006 (EB-2006-0021) which outlined principles and priorities both gas utilities were expected to follow from 2007 to 2009. The tenets of the OEB's Generic DSM Decision was subsequently extended twice, in 2010 and then again in 2011 as the OEB waited for additional guidance from the government on next steps following the announcement of the Green Energy and Green Economy Act.

## 4.2 Main Components of DSM Framework

Within the DSM Framework, the OEB outlined its direction regarding appropriate budget levels, and how those budgets will impact rate payers. The OEB determined that it would be appropriate to increase the available rate payer funding to support an expanded delivery of DSM programs across all customer classes, but that a total cost impact (inclusive of budget and shareholder incentive amounts) should be no greater than \$2.00/month for a residential customer. This cost of \$2.00/month would allow the

utilities to significantly increase the programs targeting residential customers compared to prior years. The OEB viewed the \$2.00/month threshold as a balance between ensuring all cost-effective DSM is pursued and protecting the interests of customers.

The DSM Framework also provided the guiding principles and key priorities the OEB considered important in the development of the new multi-year natural gas conservation programs. The DSM Framework outlined details related to:

- Annual targets and shareholder incentives
- Technical guidance related to cost-effectiveness screening
- Accounting treatment, and
- Program evaluation

## 4.3 Shareholder Incentives

To effectively motivate the gas utilities to both actively and efficiently pursue natural gas savings and to recognize exemplary performance, the DSM Framework continued to make shareholder incentives available.

The shareholder incentive calculation outlined in the DSM Framework evolved from an earlier version that was outlined in the 2006 Generic DSM Proceeding. The 2006 shareholder incentive rewarded the gas utilities with a portion of the overall economic benefits produced by DSM programs and was in place from 2007 to 2011.

As part of the OEB's 2012 DSM Guidelines (EB-2008-0346), the OEB implemented an incentive mechanism using a scorecard approach. A scorecard allows the gas utilities to be rewarded for undertaking important activities other than strictly reducing natural gas consumption, such as increasing customer participation in programs or installing energy efficiency measures with a long life.

As part of the current DSM Framework, the OEB determined it was appropriate to make an annual shareholder incentive available. Each gas utility is eligible to receive a total annual maximum shareholder incentive of \$10.45M, similar to the shareholder incentive at the start of 2012. The shareholder incentive is not part of the gas utilities' DSM budget. The incentive available to the gas utilities will not increase or decrease relative to approved DSM budgets, and is not increased annually for inflation.

## 5 PROGRAMS

Enbridge and Union proposed a number of different programs to help customers reduce their overall natural gas usage. The gas utilities have proposed to make these programs available to their customers throughout the course of the 2015 to 2020 period, in line with the OEB's direction. These programs are intended to assist customers of all types (residential, small and large business, schools, industrial facilities, etc.) to upgrade current technologies and equipment that use natural gas to more efficient technologies and equipment. The proposed programs are also intended to assist customers who already have efficient technologies and equipment to use them effectively in order to conserve the overall amount of natural gas used. The cumulative effect of the program approvals are reflected in the Budget, Target and Incentive sections of the Decision.

The proposed programs have been grouped under the following broader program headings:

- Resource Acquisition
- Low-income
- Market Transformation

## 5.1 Cost-Effectiveness

The DSM Framework requires that a test be applied to determine whether the benefits of a program outweigh the costs to implement the program. The economic value of a program takes into consideration benefits and cost for the gas utilities' system, and benefits and costs for the participant.

As part of the DSM Framework, the OEB determined that the gas utilities should use the Total Resource Cost-plus (TRC-plus) test when screening prospective programs to determine if they are cost effective. The TRC-plus test measures the benefits and costs of DSM programs for as long as those benefits and costs persist and applies a 15% non-energy benefit adder. The 15% non-energy benefit adder accounts for other benefits not related to the reduction in natural gas such as environmental, economic and social benefits. Under the TRC-plus test, benefits are driven by avoided natural gas costs, as well as avoided transmission and distribution costs (such as pipelines and storage facilities).

The TRC-plus test is ideal for Resource Acquisition programs because it results in a cost-benefit ratio. The central focus of Resource Acquisition programs is the reduction

in natural gas usage through energy efficient technology and equipment, as well as operational and process efficiency improvements.

Low-income programs are screened with the same TRC-plus test as Resource Acquisition programs, but given the customers impacted, the DSM Framework established a screening threshold lower than other Resource Acquisition programs. Low-income programs should have a TRC-plus ratio of at least 0.7 while Resource Acquisition programs should have a TRC-plus ratio of at least 1.0.

Market transformation programs are less amenable to the standard cost-effectiveness tests. The central goal of these programs is to change behaviours throughout the marketplace to make material and fundamental impacts on how customers view and use energy. These programs are not required to have a cost-effectiveness test.

## 5.2 Resource Acquisition

Resource Acquisition programs provide customers with rebates or financial incentives that reduce the overall cost of upgrading to more efficient technologies and equipment. The gas utilities' Resource Acquisition programs make up the greatest portion of their proposed DSM Plans and are allocated the largest share of budget and shareholder incentive.

	Resource Acquisition Programs										
Enbridge Proposed Programs	Proposed 2016 Budget	Union Proposed Programs	Proposed 2016 Budget								
Residential											
Home Energy Conservation*	\$12,148,317	Home Reno Rebate*	\$7,233,000								
Residential Adaptive Thermostats**	\$876,371	No program similar to Enbridge's									
No program similar to Union's		Energy Savings Kit (ESK)*	\$389,000								
	Commercial and	d Industrial									
Commercial & Industrial Prescriptive*	\$2,196,952	Commercial & Industrial Prescriptive*	\$6,755,000								
Commercial & Industrial Direct Install**	\$4,955,421	Commercial & Industrial Direct Install - Pilot**	\$500,000								
Custom Commercial and Industrial *	\$7,020,664	Commercial & Industrial Custom*	\$7,808,000								
Small Commercial New Construction**	\$396,933	No program similar to Enbridge's									
Energy Leaders**	\$400,000	No program similar to Enbridge's									

The OEB has aligned similar programs from each utility in the following table.

Notes: \*2015-2020, \*\*2016-2020

No overheads included in budgets shown

Enbridge's Energy Compass, Run-it-Right, and Comprehensive Energy Management programs are split between Resource Acquisition and Market Transformation Programs

Union's behavioural program falls under its Resource Acquisition programs, but has been placed in Market Transformation in this table for comparison with Enbridge.

Union's direct install 2016 budget is from Union's 2016 pilot budget.

## **Overall Findings**

Generally, the OEB finds that the Resource Acquisition programs proposed by Enbridge and Union appropriately balance the main components of the DSM Framework. The programs achieve long-term natural gas savings, high participation rates, and avoid lost opportunities.

Both utilities developed a breadth of program options for all customers. The attempt to tailor programs to commercial and industrial customers' requirements demonstrates the utilities' good understanding of their customers.

The gas utilities have proposed a variety of Resource Acquisition programs targeted at different customer groups to ensure that natural gas savings take place throughout the market. The proposed Resource Acquisition programs are also consistent with the government's conservation first policy, outlined in both the DSM Directive and LTEP, which notes that conservation initiatives should be pursued before sourcing new commodity when it is cost-effective. Further, the OEB finds that in aggregate, the proposed programs provide customers with value for money and will provide a significant amount of long-term natural gas savings. The OEB has provided program-specific findings with respect to the Resource Acquisition programs below.

## 5.2.1 Residential Home Retrofit Programs (similar)

#### **Enbridge - Home Energy Conservation Program**

#### Union - Home Reno Rebate Program

These programs provide residential customers with access to financial incentives to help offset the cost of efficiency upgrades to their homes. The gas utilities assist participating customers by first providing an energy audit of their home to identify areas of improvement and then providing rebates/incentives for residential customers to make the recommended improvements. Through Enbridge's program, customers can receive up to \$2,100 to complete an energy assessment and to offset energy efficiency upgrades. Through Union's program, customers can receive up to \$5,000 to offset energy efficiency upgrades.

## Enbridge – Home Energy Conservation – Program Details

Home Energy Conservation	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed & Approved Budget	\$8,605,657	\$1,873,185	\$12,148,317	\$15,180,000	\$18,000,000	\$18,360,000	\$18,727,200
Proposed Participant Target	5,213	762	7,508	10,000	12,346	12,948	13,478
Approved Participant Target		762	8,259	10,526	12,731	13,246	13,781
Proposed Lifetime savings (CCM)	89,690,562	Not available	102,622,499	136,680,000	168,740,741	176,970,719	184,222,043
Approved Lifetime savings (CCM)		Not available	112,884,749		Formula - see	section 9.4	
TRC-Plus Ratio	1.96	Not available	1.70	1.80	1.90	1.94	1.94

References:

2014 budget from Table 1 of 2014 Annual Report; participants from Table 3 of 2014 Annual Report; savings from Table 6 of 2014 annual report; TRC from Table 9 of 2014 Annual Report

2015 proposed target escalates by 2% (rollover year); target participants from Exhibit B, Tab 1, Schedule 3, Table 3

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14; target participants from Enbridge's IRR to EP.19 2016-2020 TRC-plus values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5

Approved 2016 target is explained in section 9.3

#### **Comments**

OEB Staff recommended that Enbridge review the amount of financial incentives that are available for participants to ensure the incentives represent appropriate value and act as a motivating factor for residential customers to participate in the program.

Energy Probe commented that the 2015 Home Energy Conservation program was shut down due to lack of funds. Energy Probe submitted that the additional budget to maintain the 2015 Home Energy Conservation program should have come out of the unused portion of the 2015 incremental budget. As well, Enbridge could have accessed an additional 30% of budget from other programs. Although Energy Probe recommended amending the 2016 Resource Acquisition scorecard, it also submitted that the OEB should approve the 2016-2017 Home Energy Conservation programs.

VECC supported Enbridge's approach to offer the Home Energy Conservation franchise-wide in 2016-2020.

Home Reno Rebate	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed & Approved Budget	\$1,997,000	\$2,202,000	\$7,233,000	\$9,880,000	\$12,226,000	\$12,226,000	\$12,226,000	
Proposed Participant Target	996	1,245	3,000	4,000	5,000	5,000	5,000	
Approved Participant Target		1,245	3,300		Formula - see	section 9.4		
Proposed Lifetime savings (CCM)	26,518,351	33,370,000	77,950,500		Formula propos	ed by Union		
Approved Lifetime savings (CCM)		33,370,000	85,745,550	Formula - see section 9.4				
TRC-Plus Ratio	0.80	0.90	1.48	Not available				

## Union – Home Reno Rebate – Program Details

References:

2014 actual budget and participants from Table 4 of 2014 Annual Report; 2014 CCM from Table 3.2 of 2014 Annual Report; 2014 TRC value from Union's IRR to CME.11 attach. 1, page 20

2015 budget and savings from Union's IRR to CCC.26 attach. 1, note that these were not updated in the final 2014 Annual Report on a program by program basis; 2015 target participants from 2014 Annual Report; 2015 TRC-plus from Union's IRR to CME.11 attach. 1

2016-2020 budgets, participants and lifetime savings from Union's Plan: Tables 2, 3 and 6 (Exhibit A, Tab 3, Appendix A)

2016 TRC-plus value from Union's DSM Plan: Table 7 (Exhibit A, Tab 3, Appendix A)

Approved 2016 target is explained in section 9.3

### Comments

Several parties had concerns about Union's proposed customer incentive levels and structure, participation level targets, and cost-effectiveness for this program. OEB Staff recommended that Union review the financial incentive structure available to residential customers to ensure it is appropriate and acted as a proper motivating factor for participation considering the cost and effort invested by participating customers.

SEC noted that Union has reduced the minimum average savings requirement for all participants from 25% to 15% for the Home Reno Rebate program. SEC noted that this seems mostly driven by a desire to make its targets easier to achieve as less natural gas savings are required by participants to qualify for a financial incentive. SEC submitted that the reduced minimum savings requirement for participants is inappropriate unless targets are substantially increased beyond those that are proposed.

CCC recommended that Union consider whether lower incentives make the overall program more cost-effective. VECC also noted several concerns with cost-effectiveness, including that the program does not pass the TRC (excluding the 15% adder) using 2014 avoided costs. VECC noted that participation levels are low compared to Enbridge's similar program.

VECC submitted that the mid-term review should include an analysis of what participation levels would be estimated if customer incentive levels were lowered. VECC also suggested that Union consider additional measures such as exposed floor insulation, drain water heat recovery, and solar water heating measures. VECC further submitted that Union should direct part of its promotional budget toward marketing and communication strategies for seniors, and that Union should consider expanding the program to include increased incentives for customers who are just above the low-income cut-off.

Union disagreed with SEC and CCC. Union noted that the program's incentives per measure have not increased, and therefore the higher incentive cap allows the program to fund more measures within a customer's home, as well as allowing Union to reach the participant targets set in the Application. Union further explained that changing the minimum average savings requirement reflects a change in how heating system efficiency is modelled, and that expert witness Mr. Neme agreed with this approach.

#### Decisions

The OEB approves Enbridge's Home Energy Conservation and Union's Home Reno Rebate programs as proposed. Both programs produce TRC-plus ratios that exceed 1.0 with the proven ability to drive cumulative cubic metres (CCM) of natural gas savings. Both programs are well established and provide the largest opportunity for residential customers to achieve significant natural gas savings.

Some parties did not support Union's lowered average savings for a participant from 25% to 15%. However, the program passes the TRC-plus test based on the 15% participant savings level. Union is expected to continually show that this program, with the new minimum average savings requirement, maintains strong, positive costeffectiveness results.

Enbridge and Union proposed different financial incentive structures for a similar program. Each utility had positive results in the past and has projected similar cost per lifetime natural gas savings figures of approximately \$0.10 per cumulative cubic metres (CCM) of gas savings. The gas utilities have chosen different goals for this program: Union is aiming to achieve more savings per customer while Enbridge is choosing to spread the savings over a larger group of customers. The OEB finds that the utilities have adequately explained the differences in program designs and goals.

Enbridge's program in 2015 was a success and exceeded targeted savings. The OEB finds the flexibility available to both utilities, to shift 30% of the approved budget to a program that exceeds expectations, is sufficient in any given year.

## 5.2.2 Enbridge - Residential Adaptive Thermostats Program

Enbridge will provide a rebate of \$75 towards the purchase of an adaptive (smart) thermostat upon proof of purchase and installation. Adaptive thermostats (which cost approximately \$250) are the latest thermostat technology that can respond to energy patterns and can be accessed by customers remotely.

## Enbridge – Residential Adaptive Thermostats – Program Details

Residential Adaptive Thermostats	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed & Approved Budget			\$876,371	\$1,525,000	\$2,175,000	\$2,218,500	\$2,262,870
Proposed Lifetime savings (CCM)	Not offered	Not offered	23,864,839	47,655,000	71,482,500	74,847,871	77,026,478
Approved Lifetime savings (CCM)	Not offered	Not offered	26,251,323		Formula - see	section 9.4	
TRC-Plus Ratio			1.68	1.75	1.77	1.79	1.79
	•	•					

References:

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14 2016-2020 TRC-plus values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5 Approved 2016 target is explained in section 9.3

#### **Comments**

Mr. Woolf of Synapse recommended that Enbridge consider increasing the incentive for this program from \$75 to at least \$100 while evaluating both customer adoption rates for this type of measure and customer payback rates.

VECC supported the residential adaptive thermostat program and submitted that Enbridge should analyze the impact of higher customer incentives as recommended by Synapse. CCC recommended that the program be approved for 2016 and 2017, but continuation of the program should be contingent upon the evaluation of a full year of results.

#### Decision

The OEB approves Enbridge's Residential Adaptive Thermostats program as proposed. The program produces TRC-plus ratios that exceed 1.0 and the forecasted CCM savings are significant. As thermostats often control a home's heating temperature in the winter and central air conditioning in the summer, the OEB finds that thermostat incentives provide a good opportunity for gas and electricity utilities to work together on an integrated program. From a customer perspective, a thermostat could provide signals to encourage conservation of both gas and electricity. Programs should be integrated with the customer as the focus, with strong conservation messaging, leveraging both the cost of communication and the incentive offered. The OEB directs Enbridge to explore this opportunity and test at least one integrated program, within its approved budget, prior to the mid-term review.

## 5.2.3 Union – Energy Savings Kit (ESK) Program

In this program, Union provides residential customers with a kit containing energy efficient showerheads, faucet aerators, pipe wrap and a coupon for a programmable thermostat, free of charge. Customers are responsible for installing the measures included within the kit themselves.

## Union – Energy Savings Kit (ESK) – Program Details

Energy Savings Kit - Not Approved	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed Budget	\$985,000	\$365,000	\$389,000	\$387,000	\$386,000	\$386,000	\$386,000
Approved Budget		\$365,000	\$0	\$0	\$ <i>0</i>	\$0	\$0
Proposed Lifetime savings (CCM)	35,141,167	11,469,000	11,990,584	12,089,924	12,099,542	12,099,542	12,099,542
Approved Lifetime savings (CCM)		11,469,000	0	0	0	0	0
TRC-Plus Ratio	53.30	Not available	77.12		Not ava	ilable	

References:

2014 TRC from Union's IRR to CME.11 attach. 1, page 20

2014 and 2015 budget and target savings from Union's IRR to CCC.26, attach. 1, note that these were not updated in the final 2014 Annual Report on a program by program basis

2016-2020 budgets and lifetime savings from Union's Plan: Tables 2, 3 and 6 (Exhibit A, Tab 3, Appendix A)

2016 TRC-plus value from Union's DSM Plan: Table 7 (Exhibit A, Tab 3, Appendix A)

## **Comments**

OEB Staff recommended discontinuing the ESK program given concerns about market saturation and energy savings arising from the measures included in the kit. CCC shared similar concerns, and also commented that the number of participants in Union's residential 2016 DSM programs seemed low for the increase in budget. Union disagreed with the suggestion that the program should be discontinued. Union submitted that the ESK program is consistent with principles and priorities of the DSM Framework because it is cost-effective and ensures broad participation and opportunities for residential customers.

Some parties recommended that ESK components, including showerheads and aerators, continue to be made available to customers participating in Union's Home Reno Rebate and Low-income programs. Some parties also recommended that aerators should be directly installed by contractors as part of Union's Low-income programs.

Several parties recommended that Union offer an adaptive thermostat program similar to that proposed by Enbridge in order to provide incentives for advanced thermostat technologies including web-enabled thermostats.

#### Decision

The OEB does not approve Union's proposed ESK program in 2016-2020. As a result, the ESK program will conclude at the end of 2015. The OEB is of the view that the market for ESK measures is saturated, as the same conservation measures have been offered as part of the kit since 2000. With double the budget available for residential customers, the OEB expects Union to explore different conservation measures and technologies and propose a new, widespread residential program at the mid-term review.

However, the OEB finds there may be opportunity within the low-income home weatherization program as a potential target market for some of the ESK program measures.

The OEB also notes that Union will pursue an adaptive thermostat pilot program in coordination with Hydro One Networks Inc. (Hydro One). Union has proposed to use \$100,000 of its pilot budget on the adaptive thermostat pilot program. The OEB is encouraged that Union will test this new smart technology in coordination with Hydro One as there appear to be the possibility for both natural gas (heating) and electricity (cooling) benefits for Ontario customers. The OEB directs Union to file the results of the adaptive thermostat pilot program at the mid-term for consideration of a larger Resource Acquisition program related to this technology.

## 5.2.4 Commercial & Industrial Prescriptive Programs (similar)

#### **Enbridge's Commercial and Industrial Prescriptive Program**

#### **Union's Commercial and Industrial Prescriptive Program**

The commercial and industrial prescriptive programs that Enbridge and Union have proposed build on the prescriptive programs from prior years and are strong contributors towards significant long-term natural gas savings. These programs provide customers with a list of recommended efficient technologies and equipment (relative to the customer's facility type and equipment size) that have pre-determined financial incentives and natural gas savings amounts. The customer is required to install the equipment on their own, unlike the proposed direct install programs.

## Enbridge – Commercial and Industrial Prescriptive – Program Details

Commercial & Industrial Prescriptive	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed & Approved Budget	\$767,984		\$2,196,952	\$2,241,134	\$2,232,905	\$2,277,564	\$2,323,114
Proposed Lifetime savings (CCM)	86,666,513		133,443,276	134,078,913	131,194,946	132,701,367	134,319,675
Approved Lifetime savings (CCM)		Not available	146,787,604		Formula - see	section 9.4	
TRC-Plus Ratio - Large Prescriptive	3.37		10.85	10.73	10.64	10.55	10.47
TRC-Plus Ratio - Small Prescriptive	5.59		28.56	28.48	28.48	28.48	28.48

References:

2014 budget and savings from Tables 15 and 17 of the 2014 Annual Report; 2014 TRCs from Table 9 of 2014 Annual Report

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14

2016-2020 TRC-plus values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5

Approved 2016 target is explained in section 9.3

## Union – Commercial and Industrial Prescriptive – Program Details

Commercial & Industrial Prescriptive	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed & Approved Budget	\$4,957,137	\$3,000,000	\$6,755,000	\$6,763,000	\$7,486,000	\$7,149,000	\$7,149,000	
Proposed Lifetime savings (CCM)	216,057,244	183,000,000	274,596,193	283,349,790	293,111,244	293,111,244	293,111,244	
Approved Lifetime savings (CCM)		183,000,000	302,055,812	Formula - see section 9.4				
TRC-Plus Ratio	1.77	Not available	4.15	Not available				
Defense								

References:

2014 budget and TRC from Table 4.1 of 2014 Annual Report (includes overheads); 2014 TRC savings from Table 3.2 of 2014 Annual Report 2015 budget and target savings from Union's IRR to VECC.9, Table 1, note that these were not updated in the final 2014 Annual Report on a program by program basis

2016-2020 budgets and lifetime savings from Union's Plan: Tables 9, 13 and 32 (Exhibit A, Tab 3, Appendix A)

2016 average TRC-plus for C/I prescriptive measures calculated from Union's Plan: Table 17 (Exhibit A, Tab 3, Appendix A) Approved 2016 target is explained in section 9.3

#### **Comments**

Parties did not specifically comment on Enbridge or Union's proposed commercial and industrial prescriptive programs.

#### Decisions

The OEB approves Enbridge's and Union's commercial and industrial prescriptive programs as proposed. Both programs produce forecast TRC-plus ratios that exceed 1.0 with the proven ability to drive CCM savings.

## 5.2.5 Commercial & Industrial Direct Install Programs (similar)

#### Enbridge's Commercial and Industrial Direct Install Program

#### **Union's Commercial and Industrial Direct Install Program**

Both gas utilities proposed similar programs for commercial and industrial customers. This program provides commercial and industrial customers with financial incentives for a set list of natural gas reducing technologies and equipment. The direct install programs differ from the prescriptive programs in that the gas utilities' involvement will go one step further and provide customers with turnkey installation. The gas utilities' direct install programs provide commercial and industrial customers with a one-stop shopping option where the customer can receive both the financial incentives and installation assistance required to seamlessly upgrade current equipment and technologies to more efficient options. Union proposed to introduce its program as a pilot in 2016 and 2017.

## Enbridge - Commercial and Industrial Direct Install - Program Details

Commercial & Industrial Direct Install	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed & Approved Budget			\$4,955,421	\$5,060,872	\$4,758,344	\$4,853,510	\$4,950,581
Proposed Lifetime savings (CCM)	Not offered	Not offered	60,358,661	61,200,000	57,541,562	58,692,377	59,866,244
Approved Lifetime savings (CCM)	Not offered		66,394,527		Formula - see section 9.4		
TRC-Plus Ratio			7.77	7.72	7.72	7.72	7.72

References:

2016-2020 budgets from Enbridge's IRR GEC.11; lifetime savings from Enbridge's IRR GEC.14

2016-2020 TRC-plus values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5

Approved 2016 target is explained in section 9.3

## Union – Commercial and Industrial Direct Install – Program Details

Commercial & Industrial Direct Install - <i>Revised</i>	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed Budget			\$500,000	\$500,000	\$0	\$0	\$0	
Approved Budget			\$500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	
Proposed Lifetime savings (CCM)	Not offered	Not offered	Not available					
Approved Lifetime savings (CCM)			6,699,181		Formula - see s	section 9.4		
TRC-Plus Ratio			Not available					

References:

2016 and 2017 proposed budget in Union's IRR: VECC.6

Approved 2016 lifetime savings are determined based on the approved budgets and rate of increase in savings based on Enbridge's targets,

and explained in section 9.3

#### **Comments**

Parties did not specifically comment on Enbridge and Union's proposed commercial and industrial direct install programs.

#### Decision

The OEB approves Enbridge's direct install program as proposed as the TRC-plus ratio exceeds 1.0 and results in cost-efficient CCM savings.

The OEB finds that Union's direct install program should not be a pilot. The OEB approves Union's proposed 2016 budget but directs Union to increase its 2017 to 2020 annual budget to \$2.5M. The OEB has considered Union's experience with its prescriptive program, and the projected results of Enbridge's direct install program, and consider these strong indicators of success for a direct install program for Union. The OEB does not want Union to miss an opportunity for significant natural gas savings. The direct install programs ensure installation of the energy efficient equipment and remove a barrier for potential participants.

As target metrics and cost-effectiveness results are required for Resource Acquisition programs, the OEB has calculated savings targets, TRC-plus results and the allocation of shareholder incentive amounts for the expanded direct install program for Union. These amounts are commensurate with Enbridge's direct install program. The OEB has redirected Union's proposed direct install pilot budget to the Resource Acquisition

program budget in 2016 and 2017. This has resulted in Union's 2016 and 2017 portfolio-level administration costs (where the direct install pilot funding was originally proposed) to be reduced accordingly.

## 5.2.6 Commercial & Industrial Custom Programs (similar)

#### **Enbridge's Commercial and Industrial Custom Program**

#### **Union's Commercial and Industrial Custom Program**

Both gas utilities have proposed similar programs for commercial and industrial customers seeking to undertake large-scale energy efficiency projects and requiring specialized advice and service. These custom programs differ from the prescriptive and direct install programs as they provide tailored services and varying financial incentives based on overall natural gas savings realized by the customer to address customer-specific needs. The proposed custom programs build upon those deployed by the gas utilities in past.

## Enbridge – Commercial and Industrial Custom – Program Details

Commercial & Industrial Custom	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020		
Proposed & Approved Budget	\$5,713,503		\$7,020,664	\$7,157,145	\$7,361,562	\$7,508,793	\$7,658,968		
Proposed Lifetime savings (CCM)	484,885,481		572,893,403	569,811,192	579,955,817	581,635,860	583,638,916		
Approved Lifetime savings (CCM)		Not available	630,182,743		Formula - see section 9.4				
TRC-Plus Ratio - Large Custom	2.00		3.10	3.10	3.10	3.10	3.09		
TRC-Plus Ratio - Small Custom	3.89		1.18	1.18	1.18	1.18	1.18		

References:

2014 budget and savings from Tables 15 and 17 of the 2014 Annual Report; 2014 TRC from Table 9 of 2014 Annual Report

2016-2020 budgets from Enbridge's IRR GEC.11; lifetime savings from Enbridge's IRR GEC.14

2016-2020 TRC-plus values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5

Approved 2016 target is explained in section 9.3

## Union – Commercial and Industrial Custom – Program Details

Commercial & Industrial Custom	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed & Approved Budget	\$7,784,256	\$5,117,000	\$7,808,000	\$7,808,000	\$7,808,000	\$7,808,000	\$7,808,000	
Proposed Lifetime savings (CCM)	683,855,047	699,000,000	745,094,379	745,094,379	745,094,379	745,094,379	745,094,379	
Approved Lifetime savings (CCM)		699,000,000	819,603,817	Formula - see section 9.4				
TRC-Plus Ratio	1.09	Not available	1.99	Not available				

References:

2014 budget and TRC from Table 4.1 of 2014 Annual Report (includes overheads); 2014 TRC savings from Table 3.2 of 2014 Annual Report 2015 budget and target savings from Union's IRR to VECC.9, Table 1, note that these were not updated in the final 2014 Annual Report on a program by program basis

2016-2020 budgets and lifetime savings from Union's Plan: Tables 9, 13 and 32 (Exhibit A, Tab 3, Appendix A)

2016 average TRC-plus for C/I custom measures estimated from Union's Plan: Table 17 (Exhibit A, Tab 3, Appendix A) Approved 2016 target is explained in section 9.3

### Comments

Many parties were concerned with free riders to custom programs. A free rider is a participant that would have undertaken the project without the added financial incentive offered by the utility. A free rider rate of approximately 50% is assumed by both utilities, which is used in the TRC-plus calculation for each project.

Mr. Woolf of Synapse recommended the utilities add a payback criterion ranging from one to three years for custom projects. If this recommendation was approved and implemented, a customer incentive could not be given for a project with a payback of one year or less.

Mr. Neme of Energy Futures Group indicated that customer projects with very short payback periods were more likely to have free riders, yet there were factors, other than payback period, that influence whether a customer is a free rider.

SEC and OEB Staff proposed that incentives not be given to custom projects with payback periods below 2 and 1.5 years respectively. Establishing a new screening criteria for project eligibility would reduce the number of free riders. OGVG generally agreed. SEC also recommended that each custom project should be required to meet the 1.0 cost-effectiveness test to receive an incentive.

Enbridge explained that imposing a payback criteria and a cost-effectiveness threshold for individual custom projects is inconsistent with achieving new levels of leadership, innovation, and risk-taking. Enbridge submitted that a new payback criterion is not appropriate for a variety of reasons, and stressed that the current targets and free ridership rate for custom projects would need to be adjusted if a payback threshold was imposed.

Union explained that custom projects are already subject to its free ridership rate of 54%, which is based on all projects, including projects with shorter payback periods. If a minimum payback criterion was mandated and the current free rider rate was maintained, it would be double counting. Union further argued that payback period is only one of the many factors affecting a customer's decision to proceed with a project, and that equating low payback periods with free ridership was not appropriate. Union further commented that screening cost-effectiveness at the project level would be counter to the direction of the DSM Framework, and would not ensure that a broad suite of projects and technologies are included in the custom program.

#### Decisions

The OEB approves Enbridge's and Union's commercial and industrial custom programs as proposed. The programs produce TRC-plus ratios that exceed 1.0 and provide significant CCM savings.

The OEB will not require the utilities to change the program selection criteria to require all participants to have a payback of at least one year as suggested by some parties. The main concern with the custom program is the existence of free riders. Ideally, free riders should be screened out and significantly reduced rather than receive financial incentives they do not require, thereby adding to the cost of program delivery, which is recovered from all others within the rate class.

The OEB finds that implementing a payback threshold of greater than one year may exclude some free riders but does not fully address this issue. The OEB agrees with the testimony of the expert witness, Mr. Neme, who indicated that it is preferable to improve program design and target the proper customers in order to screen out free riders at the outset, rather than later in the process, after investing considerable utility time and effort. For the mid-term review, the OEB directs Enbridge and Union to provide evidence showing how it has lowered the free ridership rates in these programs.

Successful program design and eligibility criteria, as well as participant surveys and effective program targeting, should decrease the free ridership levels of custom programs, all other things being equal.

The OEB does not expect the gas utilities to rely on a predetermined free ridership rate for the duration of the 2017 to 2020 term. In 2016, the free rider rates will be updated based on the results of the net-to-gross study and the annual evaluation process. Annually, the evaluation process will continue to inform the free rider rates for custom programs. At the mid-term review, Enbridge and Union will provide evidence to either demonstrate the effectiveness of its screening efforts or identify the barriers to lowering the free rider rate in commercial and industrial custom programs.

## 5.2.7 Enbridge Small Commercial New Construction Program (Pilot)

This new program is proposed on a pilot basis in 2016, with results to begin to be measured in 2017. The goal of this program is to reach small commercial builders and owners/developers. The program will provide financial incentives to implement energy performance modeling tools in addition to financial incentives for achieving specific energy efficiency targets. Participants will receive financial incentives for projects that achieve an energy efficiency level at least 5% above the current Ontario Building Code

(OBC) standards. Enbridge has proposed this program as it believes it will enable a larger portion of the new construction projects to participate.

## Enbridge – Small Commercial New Construction – Program Details

Small Commercial New Construction	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed Budget			\$396,933	\$1,305,566	\$2,396,825	\$2,444,762	\$2,493,657
Approved Budget		Not offered	\$396,933	\$1,305,566	\$1,305,566	\$0	\$0
Proposed Lifetime savings (CCM)	Not offered		N/A	14,620,000	17,960,200	19,548,431	23,236,432
Approved Lifetime savings (CCM)			N/A	16,082,000	N/A	N/A	N/A
TRC-Plus Ratio					Not available		

References:

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14 Approved 2016 target is explained in section 9.3

#### <u>Comments</u>

OEB Staff submitted that the 5% energy achievement increase above the current OBC standard is too small to quantify during the evaluation of the program. OEB Staff proposed to increase Enbridge's proposed 5% above the OBC to at least 15% above the 2012 OBC to ensure that Enbridge has truly influenced the building practices.

#### **Decision**

The OEB agrees the Small Commercial New Construction program is a pilot as it is new and Enbridge did not provide TRC-plus results to indicate cost-effectiveness. The OEB will approve the proposed budget in 2016 and 2017, but finds no basis on which to approve budget increases in 2018-2020. As a result, the 2017 budget of \$1,306,000 is approved for 2018. The OEB expects the pilot's results will be evaluated at the midterm to determine if the program should be continued in 2019 and 2020.

## 5.2.8 Enbridge – Energy Leaders Program

This new program is targeted to assist those commercial and industrial customers who have been identified as energy efficiency leaders to become even more efficient. This program differs from Enbridge's other commercial and industrial programs as it has been tailored to target and assist those customers that have already undertaken basic efficiency upgrades and are looking to achieve harder-to-reach savings. Enbridge will offer energy audits and increased customer incentives compared to those available in its other commercial and industrial programs to help customers implement new and innovative technologies.

## Enbridge – Energy Leaders – Program Details

Energy Leaders	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed Budget			\$400,000	\$600,000	\$800,000	\$816,000	\$832,320
Approved Budget - As Pilot	Not offered	Not offered	\$400,000	\$400,000	\$400,000	\$0	\$0
TRC-Plus Ratio					Not available		

Note: No evaluation metrics as this program is a lead-in to other programs

References:

2016-2020 budgets from Enbridge's IRR to GEC.11

Approved 2016 target is explained in section 9.3

#### <u>Comments</u>

OSEA submitted that the Energy Leaders initiative is a good first step towards incentivizing sustainable technologies, but that it should be expanded on a mass-market scale. SEC similarly indicated that although it has potential to be a very good program, it is currently more of a marketing initiative.

#### Decision

The OEB considers the Energy Leaders program to be a pilot as it has not been offered before and Enbridge did not provide a forecast of savings or TRC-plus results to indicate cost-effectiveness. The OEB will approve the proposed budget in 2016, but finds no basis on which to approve budget increases in 2017-2020. As a result, an annual budget of \$400,000 is approved for 2017 and 2018 and the OEB expects the pilot's results will be evaluated at the mid-term to determine if the program should be continued in 2019 and 2020.

## 5.3 Low-income

Low-income programs are a subset of the Resource Acquisition programs as the main focus is increasing the energy efficiency of homes and buildings in order to reduce overall natural gas consumption. The gas utilities' proposed low-income programs provide low-income customers with opportunities to upgrade the energy efficiency of their homes (for residential customers) and buildings (for multi-family customers and building owners) at no cost to eligible participants.

In the table below, the OEB has aligned similar programs from each utility.

Low Income Programs										
Enbridge Proposed Programs	Proposed 2016 Budget	Union Proposed Programs	Proposed 2016 Budget							
Single Family Dwellings										
Home Winterproofing*	\$5,756,064	Home Weatherization*	\$6,285,000							
No program similar to Union's		Aboriginal**	\$8,000							
No program similar to Union's		Furnace End-of-Life Upgrade**	\$761,000							
	Multi-Family D	wellings								
Low Income Multi-Residential – Affordable Housing*	\$3,279,028	Multi-Family*	\$2,651,000							
Low Income New Construction*	\$1,116,696	No program similar to Enbridge's								

Note: \*2015-2020, \*\*2016-2020

No overheads included in budgets shown

#### **Overall Findings**

The DSM Framework directed the gas utilities to develop programs to assist low-income customers to become more energy efficient and to assist with reducing their consumption of natural gas. Both Enbridge and Union have introduced new programs targeting low-income customers. Some of the programs proposed for low-income customers either did not have cost-effectiveness results or did not meet the TRC-plus ratio threshold of 0.7.

The OEB will approve all of the low-income programs proposed by both Enbridge and Union to proceed. In aggregate, the low-income programs meet the TRC-plus ratio of 0.7. The OEB expects that the gas utilities continue to improve the cost-effectiveness results of the low-income programs throughout the 2015-2020 DSM term.

The OEB finds that the proposed programs offer critical energy efficiency opportunities for vulnerable customers and are important to be delivered at the outset of the new multi-year DSM term. However, the OEB encourages the utilities to seek efficiencies in program delivery as they continue to gain experience with these programs. In addition, as the utilities learn more about this customer segment, new low-income program opportunities could be considered at the mid-term review. The OEB expects that each low-income program will meet the low-income TRC-plus ratio of 0.7 at the time of the mid-term review to allow it to proceed.

## 5.3.1 Low-Income Winter Retrofit Programs (similar)

#### Enbridge - Home Winterproofing Program

#### **Union - Home Weatherization Program**

Through the Home Winterproofing and Home Weatherization programs proposed by Enbridge and Union respectively, the gas utilities will provide eligible<sup>1</sup> customers with a home energy assessment and weatherization services (i.e., installing insulation and draft proofing measures – air sealing) at no cost to eligible participants. Customers are also eligible to receive energy efficient showerheads, faucet aerators and a programmable thermostat. The gas utilities have proposed to add a financial incentive to help customers upgrade their furnace in 2016. As a health and safety measure, the gas utilities will also provide carbon monoxide monitors where one is not present. Participating customers will also receive energy education.

## Enbridge – Home Winterproofing – Program Details

Home Winterproofing	2014	2015	2016	2017	2018	2019	2020
(Low-Income)	(actuals)	(proposed)	2010	2017	2010	2019	2020
Proposed Budget	\$4,494,530	\$4,655,790	\$5,756,064	\$6,240,000	\$6,427,200	\$6,555,744	\$6,686,859
Approved Budget		\$4,655,790	\$5,806,064	\$6,290,000	\$6,477,200	\$6,605,744	\$6,736,859
Proposed Lifetime Savings (CCM)	25,673,482	24,100,000	28,900,000	30,300,000	30,300,000	30,000,000	29,700,000
Approved Lifetime Savings (CCM)		24,100,000	31,790,000				
TRC-Plus Ratio	1.03	Not available	1.20	1.19	1.19	1.18	1.17
Peferences:							

2014 budget from Table 8 of 2014 Annual Report; savings from Table 1 of 2014 Annual Report; TRC from Table 9 of 2014 Annual Report

2015 budget from Enbridge's undertaking JT1.6; savings from undertaking JT1.36

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14

2016-2020 TRC-plus values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5

Approved 2016 target is explained in section 9.3

## Union – Home Weatherization – Program Details

Home Weatherization (Low-Income)	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed Budget	\$5,239,000	\$4,442,000	\$6,285,000	\$6,086,000	\$7,445,000	\$8,013,000	\$8,324,000	
Approved Budget		\$4,442,000	\$6,335,000	\$6,136,000	\$7,495,000	\$8,063,000	\$8,374,000	
Proposed Lifetime savings (CCM)	36,105,327	26,000,000	32,772,265	32,080,315	34,430,515	37,090,124	38,524,280	
Approved Lifetime savings (CCM)		26,000,000	36,049,492	Formula - see section 9.4				
TRC-Plus Ratio	0.81	Not available	1.81	Not available				

References:

2014 budget from Union's IRR to GEC.58; 2014 savings at Table 3.2 of 2014 Annual Report; TRC represents combined ratio for Low Income portfolio, p. 54 2015 budget from Union's IRR to VECC.9, Table 1; 2015 target savings from Union's Plan: Table 9 (Exhibit A, Tab 2)

2016-2020 budget and lifetime savings from Union's Plan: Tables 27 and 31 (Exhibit A, Tab 3, Appendix A)

2016 TRC-plus from Union's Plan: Table 32 (Exhibit A, Tab 3, Appendix A)

Approved 2016 target is explained in section 9.3

<sup>1</sup> Participants are eligible for the Enbridge Home Winterproofing program if they are an Enbridge customer, pay their own gas bill, use natural gas for heating and either have a household income less than the Low-income Cut-Off ("LICO") plus 35% or participate in a government assistance program.

### <u>Comments</u>

Parties were generally supportive of both Enbridge's Home Winterproofing and Union's Home Weatherization program. Both LIEN and VECC suggested that the gas utilities be required to install faucet aerators as part of the programs instead of leaving them behind for the customer to install on their own.

In its reply submission, Enbridge noted that it is open to exploring suggestions directed at enhancing the Home Winterproofing program, including installing faucet aerators, which it estimated would approximately cost an additional \$50,000 per year.

In its reply submission, Union noted that it is open to piloting direct installation of faucet aerators to assess the full incremental cost.

#### Decisions

The OEB approves Enbridge's Home Winterproofing and Union's Home Weatherization programs which target low-income households. The OEB finds merit in the recommendation that the utilities provide installation of the conservation measures as part of the offering. Providing installation services removes a potential barrier for the participant and provides greater assurance that the energy efficiency measures will deliver the expected natural gas savings. This is consistent with the OEB's findings regarding the prescriptive direct install programs that target commercial and industrial customers. More important, the installation helps the low-income participant, simplifying the offer and guaranteeing gas savings benefits are achieved right away. The OEB approves an annual budget increase of \$50,000 for both Enbridge and Union to install faucet aerators.

## 5.3.2 Union – Aboriginal Program

Union's proposed Aboriginal program combines delivery of its Home Weatherization and Furnace-End-of-Life Upgrade programs within Aboriginal reserves. Eligible customers will receive free natural gas energy efficiency measures installed by Union representatives as well as a financial incentive to upgrade their existing furnace to an energy efficient furnace when it needs to be replaced. As part of the Aboriginal program, customers that do not have a carbon monoxide detector will receive one at no cost.

## Union – Aboriginal – Program Details

Aboriginal (Low-Income)	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed & Approved Budget			\$8,000	\$419,000	\$511,000	\$456,000	\$448,000	
Proposed Lifetime savings (CCM)	Not offered	Not offered	Not applicable	1,383,782	1,486,178	1,471,550	1,486,178	
Approved Lifetime savings (CCM)	Not offered		Not applicable					
TRC-Plus Ratio			Not available					
Peferences:								

2016-2020 budget and lifetime savings from Union's Plan: Tables 27 and 31 (Exhibit A, Tab 3, Appendix A) Approved 2016 target is explained in section 9.3

#### **Comments**

Parties did not object to Union's Aboriginal program.

#### Decision

The OEB approves Union's Aboriginal program as proposed. Union has identified the Aboriginal segment within its service territory as a potential market for a low-income program. The OEB finds it appropriate for Union to reach out to this sub segment, with a steady annual budget, enabling Union to learn and tailor its promotion.

## 5.3.3 Union – Furnace End-of-Life Upgrade Program

Union's proposed Furnace End-of-Life Upgrade program will provide social and assisted housing providers and private market customers, such as landlord or a homeowner, with a financial incentive to upgrade to a 95% or greater efficiency rating furnace when their existing furnace reaches the end of its life and needs to be replaced.

## Union – Furnace End-of-Life Upgrade – Program Details

Furnace End-of-Life (Low-Income)	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed & Approved Budget		Not offered	\$761,000	\$784,000	\$924,000	\$919,000	\$917,000
Proposed Lifetime savings (CCM)			1,578,960	938,088	1,646,298	1,472,148	1,228,338
Approved Lifetime savings (CCM)	Not offered		1,736,856	Formula - see section 9.4			
TRC-Plus Ratio			0.37	Not available			

References:

2016-2020 budget and lifetime savings from Union's Plan: Tables 27 and 31 (Exhibit A, Tab 3, Appendix A) 2016 TRC-plus from Union's Plan: Table 32 (Exhibit A, Tab 3, Appendix A)

Approved 2016 target is explained in section 9.3

#### **Comments**

LIEN and VECC supported Union's proposed Furnace End-of-Life Upgrade program. VECC noted that the program allows customers who would not otherwise be able to upgrade their furnace to a high efficiency model to have an opportunity to make that upgrade. SEC did not support the approval of this program arguing that it is not costeffective. SEC submitted that these funds should be directed to programs that are costeffective.

#### Decision

The OEB approves Union's Furnace End-of-Life upgrade program. The OEB finds this stand-alone offering is appropriate for the low-income segment. The appropriate time to upgrade a furnace and install gas-saving technology is at the end of a furnace's useful life. Financial pressures may impede the ability to replace the furnace with a higher efficiency model. Lifetime savings (CCM) will result from an end-of-life upgrade.

Low-income homeowners receive 100% of the incremental cost<sup>2</sup> of the upgrade. However, if a landlord is upgrading a furnace for a low-income tenant, the OEB finds it appropriate for Union to pay 50% of the incremental cost, the same percentage paid for social housing buildings.

## 5.3.4 Low-Income Multi-Residential Programs (similar)

#### Enbridge - Low-Income Multi-Residential – Affordable Housing Program

#### **Union - Multi-Family Program**

The gas utilities' proposed low-income multi-residential programs to provide customers living in social-housing buildings and privately-owned buildings with a high proportion of low-income residents, a variety of energy efficiency measures, energy audits and education. Social and assisted housing providers can receive financial incentives to use towards gas boilers, ventilation systems, custom measures (e.g., building envelope, insulation, etc.), window upgrades and energy benchmarking services. Tenants will be eligible to receive energy efficient showerheads, faucet aerators, and educational information related to energy efficiency and conservation.

<sup>&</sup>lt;sup>2</sup> The incremental cost is the difference in price between the high efficiency equipment and the existing base case equipment.

# Enbridge – Low-Income Multi-Residential – Affordable Housing – Program Details

Low-Income Multi-Residential -	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Affordable Housing Proposed & Approved Budget	(actuals) \$1.930.180	(proposed) \$2,208,300	\$3,279,028	\$3.418.121	\$3,813,296	\$3,889,562	\$3,967,353
Proposed Lifetime savings (CCM)	29,801,158	. , , ,		. , ,	., ,	1.1/2.2.1/2.2	73,300,000
Approved Lifetime savings (CCM)		68,700,000	64,900,000	Formula - see section 9.4			
TRC-Plus Ratio	2.03	Not available	1.87	1.88	1.88	1.88	1.88

References:

2014 budget from Table 8 of 2014 Annual Report; savings from Table 1 of 2014 Annual Report; TRC from Table 9 of 2014 Annual Report 2015 budget from Enbridge's undertaking JT1.6; savings from undertaking JT1.36

2016-2020 budgets from Enbridge's IRR GEC.11; lifetime savings from Enbridge's IRR GEC.14

2016-2020 TRC-plus values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5

Approved 2016 target is explained in section 9.3

#### **Comments**

Parties were largely supportive of Enbridge's Low-Income Multi-Residential – Affordable Housing program. LIEN suggested that the OEB require both utilities to implement at least one comfort measure that provides direct benefits(s) to low-income tenants (as opposed to only benefits for building owners).

Enbridge did not specifically respond to this suggestion, but noted that it is open to exploring suggestions of opportunities to enhance its low-income offers and engage with low-income stakeholders through formal and informal discussions.

## Union – Multi-Family – Program Details

2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
\$2,221,000	\$1,385,000	\$2,651,000	\$3,359,000	\$2,984,000	\$3,031,000	\$3,573,000
21,586,843	17,600,000	17,141,672	18,995,389	18,344,563	20,028,638	20,024,214
	17,600,000	18,855,839	Formula - see section 9.4			
0.81	Not available	1.50	Not available			
	\$2,221,000 21,586,843	2014 (actuals)         (proposed)           \$2,221,000         \$1,385,000           21,586,843         17,600,000           17,600,000         17,600,000	2014 (actuals)         (proposed)         2016           \$2,221,000         \$1,385,000         \$2,651,000           21,586,843         17,600,000         17,141,672           17,600,000         18,855,839	2014 (actuals)         (proposed)         2016         2017           \$2,221,000         \$1,385,000         \$2,651,000         \$3,359,000           21,586,843         17,600,000         17,141,672         18,995,389           17,600,000         18,855,839         17,600,000         18,855,839	2014 (actuals)         (proposed)         2016         2017         2018           \$2,221,000         \$1,385,000         \$2,651,000         \$3,359,000         \$2,984,000           21,586,843         17,600,000         17,141,672         18,995,389         18,344,563           17,600,000         18,855,839         Formula - see	2014 (actuals)         (proposed)         2016         2017         2018         2019           \$2,221,000         \$1,385,000         \$2,651,000         \$3,359,000         \$2,984,000         \$3,031,000           21,586,843         17,600,000         17,141,672         18,995,389         18,344,563         20,028,638           17,600,000         18,855,839         Formula - see section 9.4

Note: TRC-Plus for 2016 relates to custom projects. 2016 target is made up of Social and Assisted and Market Rate Multi-Family Metrics References:

2014 budget from Union's IRR to GEC.58; 2014 savings at Table 3.2 of 2014 Annual Report; TRC represents combined ratio for Low Income portfolio, p. 54 2015 budget from Union's IRR to VECC.9, Table 1; 2015 target savings from Union's Plan: Table 9 (Exhibit A, Tab 2)

2016-2020 budget and lifetime savings from Union's Plan: Tables 27 and 31 (Exhibit A, Tab 3, Appendix A)

2016 TRC-plus from Union's Plan: Calculated from both prescriptive and custom measures in Table 32 (Exhibit A, Tab 3, Appendix A) Approved 2016 target is explained in section 9.3

#### **Comments**

Some parties were critical of Union's proposed Multi-Family program, noting that it has a low cost-effectiveness result, below the suggested TRC-plus level of 0.7. SEC did not support the approval of this program stating that it would not be a good use of customer funds. FRPO had issues with Union's design and understanding of Low-Income Market Rate Multi-Family Buildings. LIEN submitted that the utilities should be required to implement at least one comfort measure that provides direct benefits to low-income tenants as opposed to benefits for building owners.

Union did not agree that it should be required to install at least one measure that directly benefits low-income tenants. Union questioned the ability to measure this criterion and the potential for this additional criterion to compromise its ability to deliver the multifamily program.

#### Decision

The OEB approves Enbridge's Multi-Residential-Affordable Housing and Union's Multi-Family programs. While the OEB supports educational initiatives, the OEB does not approve the energy benchmarking services aspect, as the associated benefits were not clear. The OEB will not require the utilities to implement at least one measure that provides additional comfort to the resident. The objective of this program is to achieve gas savings which will be realized through the delivery of the proposed programs.

The Multi-Family program has a custom and a prescriptive component, which exceeds the cost-effectiveness test of 0.7 on a combined basis. The OEB encourages Union to understand the challenges of the custom component of its program, with the objective of increasing the TRC-plus ratio of the custom component to at least 0.7.

## 5.3.5 Enbridge – Low-Income New Construction Program

Enbridge's proposed low-income new construction program will provide home builders with workshops, energy efficiency modeling tools, design options, energy efficiency education and financial incentives related to new affordable housing new construction developments.

## Enbridge – Low-Income New Construction – Program Details

Low-Income New Construction	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020		
Proposed & Approved Budget		\$250,000	\$1,116,696	\$1,200,000	\$1,400,000	\$1,428,000	\$1,456,560		
Proposed Participant Target		Not available	5	7	9	8	5		
Approved Participant Target	Not offered		6	Formula - see section 9.4					
Proposed and Approved % Part 3	Not offered	40% (metric in	Natarriashia						
Participants Enrolled		2015 only)	Not applicable						
TRC-Plus Ratio		Not applicable							
D. (									

References:

2015 budget was part of Enbridge's incremental budget, not Enbridge's 2015 Low-Income budget, see Enbridge's DSM Plan: Exhibit B, Tab 1, Schedule 3, Page 16. 2016-2020 budgets from Enbridge's IRR to GEC.11

Approved 2016 target is explained in section 9.3

#### Comments

Parties were supportive of Enbridge's proposed Low-Income New Construction program. A few parties suggested that Union also be required to develop and offer a similar low-income new construction program to building developers in its territory. Union did not agree that it should be required to develop a low-income new construction program due to a lack of a significant enough opportunity in this market.

#### **Decision**

The OEB approves Enbridge's Low-income New Construction program. Generally, the OEB is supportive of new construction programs that avoid lost opportunities. This program is consistent with the intent of Enbridge's other new construction programs and targets another customer segment.

## 5.4 Market Transformation

Market Transformation programs focus on changing customer behaviour and attitudes related to energy efficiency and energy conservation. Ultimately, market transformation programs are meant to make a permanent change in the market place over a period of time.

The gas utilities have proposed a variety of programs that aim to change areas of the residential and commercial sectors to increase energy efficiency and energy conservation practices. The TRC-plus test is not applied to Market Transformation programs as gas savings are difficult to measure given these programs focus on increasing the energy efficiency knowledge of the target market. Although gas and electricity savings may result from these programs, energy savings typically are not the primary goal.

As Union's Performance-Based programs are similar to Enbridge's Market Transformation programs, they have been included in this section. The OEB has aligned similar programs from each utility in the following table.
	Market Transforma		
Enbridge Proposed Programs	Proposed 2016 Budget	Union Proposed Programs	Proposed 2016 Budget
Residential Savings by Design*	\$3,250,842	Optimum Home***	\$841,000
My Home Health Record (Opower)*	\$3,913,434	Behavioural**	\$1,124,000
Commercial Savings by Design*	\$1,345,890	No program similar to Enbridge's	
New Construction Commissioning**	\$850,000	No program similar to Enbridge's	
Home Rating*	\$1,100,000	No program similar to Enbridge's	
Energy Compass*	\$302,197	No program similar to Enbridge's	
School Energy Competition**	\$302,197	No program similar to Enbridge's	
Small Commercial & Industrial Behavioural**	N/A	No program similar to Enbridge's	
Energy Literacy****	\$0	No program similar to Enbridge's	
		Performance Based Programs (Union Only	)
Run it Right*	\$1,510,986	RunSmart*	¢207.000
Comprehensive Energy Management*	\$513,735	Strategic Energy Management**	\$297,000

Notes: \*2015-2020, \*\*2016-2020, \*\*\*2015-2016, \*\*\*\*2017-2020

No overheads included in budgets shown

No budget was provided for Enbridge's Small Commercial & Industrial Behavioural program

Enbridge's Energy Literacy budget was allocated to the portfolio budget for 2017-2020, with a budget of approximately \$500,000 per Enbridge's Energy Compass, Run-it-Right, and Comprehensive Energy Management programs are split between Resource Acquisition and Market Transformation Programs

Union's behavioural program falls under its resource acquisition programs, but has been placed in market transformation in this table for comparison with Enbridge.

Union did not provide separate budgets for RunSmart and Strategic Energy Management.

#### **Overall Comments**

Parties were generally supportive of Enbridge's proposed Market Transformation programs as they provide opportunities for a variety of customers and enhance Enbridge's other DSM programs. Parties were less supportive of Union's proposed programs and expressed concern that Union was missing opportunities to make material changes in the market. OEB Staff and GEC suggested that Union be required to implement additional Market Transformation programs and that Enbridge and Union provide similar opportunities for their customers.

GEC suggested that the majority of Enbridge's proposed Market Transformation programs be reclassified as Resource Acquisition programs or pilot programs. GEC submitted that many of Enbridge's proposed market transformation programs seek to advance educational aspects or test new program design concepts and should be treated as either a Resource Acquisition or pilot program to effectively assess performance.

In response to GEC's submission, Enbridge submitted that its Market Transformation programs had been designed in response to the OEB's DSM Framework and the American Council for an Energy-Efficient Economy guidance on how market transformation programs are designed. Enbridge submitted that the behavioural aspects of its programs were consistent with market transformation principles and that

behavioural changes are not the same as acquiring natural gas savings. Enbridge submitted the goals of its programs are to increase participation, energy literacy, benchmarking, and behavioural aspects, rather than just CCM of gas savings.

#### **Overall Findings**

The OEB finds the Market Transformation programs generally acceptable. Enbridge proposed a variety of new programs. Union proposed two programs. The OEB finds that these programs are generally consistent with the DSM framework as they seek to educate and inform segments of the market with the goal of making a permanent change. These programs also engage customers who may not be aware of their energy conservation options. The OEB would have benefitted from a clearer articulation of the goals of each of the Market Transformation programs. The OEB is less concerned with program labeling, provided the value to customers is evident.

For the mid-term, the OEB would expect the utilities to provide an internally-derived summary of market needs to demonstrate how the selected Market Transformation programs were prioritized and targeted to close those gaps. Each utility may also want to consider the proportion of its overall DSM budget allocated to Resource Acquisition, Low-income and Market Transformation relative to its customer mix and evolving customer needs.

The OEB regards Market Transformation programs as an opportunity to inform and change key segments of the market to make lasting changes to the manner in which they view and use energy.

The OEB has approved some of the Market Transformation programs as filed, directed that others be properly classified as Resource Acquisition programs, and did not approve others. All of the details related to the programs are outlined below.

## 5.4.1 Residential New Construction Programs (similar)

### Enbridge - Residential Savings by Design Program

#### **Union – Optimum Home Program**

These programs aim to encourage residential developers to construct projects that are more efficient than required by the Ontario Building Code standards. The programs cover a total energy approach, as opposed to natural gas only. Enbridge will provide developers with education aimed at identifying potential design opportunities and achievable energy savings. Through a subsequent design process, developers are eligible to receive financial incentives for implementing new energy efficiency concepts in their developments. Union has proposed to end the Optimum Home program at the end of 2016 until the new Ontario Building Code comes into effect.

## Enbridge – Residential Savings by Design – Program Details

Residential Savings by Design	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed & Approved Budget	\$1,334,035	\$2,493,900	\$3,250,842	\$3,250,000	\$3,250,000	\$3,320,443	\$3,392,296	
Proposed Participant Target - Builders Enrolled	23	18	30	20	22	23	25	
Approved Participant Target - Builders Enrolled	23	18	33	Formula - see section 9.4				
Proposed Participant Target - Homes Built	1,059	1,111	2,501	2,250	2,295	2,341	2,388	
Approved Participant Target - Homes Built		1,111	2,751	Formula - see section 9.4				
TRC-Plus Ratio		Not A	pplicable - Market	Transformation Ne	Fransformation New Construction Program			

References:

2014 budget from Table 8 of 2014 Annual Report; 2014 builder enrolled and homes metric participant metric from Table 3 of 2014 Annual Report 2015 proposed target escalates the 2014 proposed budget by 2% (rollover year); target builder enrolled and homes metric participant metric from Enbridge's Plan:

Exhibit B, Tab 1, Schedule 3, Table 7

2016-2020 budgets from Enbridge's IRR to GEC.11

Approved 2016 target is explained in section 9.3

#### **Comments**

Parties were largely supportive of Enbridge's Residential Savings by Design program. OEB Staff and Energy Probe suggested that Enbridge reduce its maximum customer incentive to a participating builder. OEB Staff suggested that the same transformative impact could be achieved if incentive levels were reduced from \$300,000 to \$175,000 and the number of houses a builder could earn an incentive on was lowered. VECC suggested that the OEB increase Enbridge's proposed scorecard targets.

In response, Enbridge submitted that the current incentive structure is intended to minimize lost opportunities and is important to continue to push builders to implement energy efficiency designs in future projects.

## Union – Optimum Home – Program Details

Optimum Home	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed Budget	\$1,262,958	\$1,185,000	\$841,000	0	0	0	0	
Approved Budget		\$1,185,000	\$841,000	\$841,000	\$841,000	\$841,000	\$841,000	
Proposed Participant Target (Homes built >20% above OBC 2012 by participating builders as % of building stock)	365 homes (equivalent to 14.73%)	29.73%	2015 Actuals + 20%	Not provided				
Approved Participant Target		29.73%	2015 Actuals + 20%	- Formula - see section 9.4				
TRC-Plus Ratio				Not applicable				

References:

2014 budget from Table 7.2 of 2014 Annual Report; 2014 participants target achievement from Tables 7.0 and 7.1 of same report 2015 budget from Union's IRR to VECC.9, Table 1; 2015 target participants from Table 14.8 of 2014 Annual Report 2016 budget from Union's Plan: Table 34 (Exhibit A, Tab 3, Appendix A)

Approved 2016 target is explained in section 9.3

#### **Comments**

OEB Staff and GEC opposed Union's proposal to discontinue its Optimum Home program after 2016, as it would result in lost opportunities, lost savings for multiple years and sacrifice visibility and momentum of the program.

#### **Decisions**

The OEB approves Enbridge's Residential Savings by Design program as proposed. The OEB finds the program is consistent with guiding principles of the DSM Framework and the program's objectives are clear. Additionally, the OEB considers this program to be an excellent opportunity for gas and electricity utilities to work together with consumer needs at the forefront of program design, providing comprehensive, integrated conservation measures to new homes.

The OEB will not direct Enbridge to change the incentive and target levels proposed. The OEB agrees with the goal of minimizing lost opportunities with the focus of increasing the number of new homes affected. The OEB agrees with Enbridge's approach of working with builders to develop a design process to install conservation measures before the home is built, thereby maximizing the lifetime savings in the home, rather than in subsequent renovation and installation projects.

The OEB approves Union's Optimum Home program as proposed in 2016. The OEB finds that this program represents significant potential. The OEB directs Union to continue its Optimum Home program from 2017 to 2020 with an annual budget equal to that in 2016. Stopping this program in 2016 would lead to missed opportunities for gas savings as the new construction market continues to evolve and houses continue to be built, despite pending building code changes. Annual target metrics will be based on

Union's 2016 program proposal. Once the 2017 Ontario Building Code standards are in effect, Union should continue to target improvements of 15% above the new standards, consistent with Enbridge's program target.

The OEB suggests that Enbridge and Union consider categorizing these programs as Resource Acquisition programs at the mid-term, with CCM saving targets similar to prescriptive programs in addition to participant targets.

## 5.4.2 Residential Home Energy Report Programs (similar)

#### Enbridge – My Home Health Report Program

#### **Union – Behavioural Program**

These programs provide customers with energy reports and access to an online webpage that shows their natural gas consumption levels and includes a comparison to other similar houses. Customers also receive tips on how to lower their natural gas usage and marketing material related to available energy efficiency and/or conservation programs. These programs aim to drive customers to change their energy usage patterns and actions by informing them of their current consumption levels and framing this message relative to other similar customers.

## Enbridge – My Home Health Report – Program Details

My Home Health Report - Not Approved	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed Budget		\$2,650,000	\$3,913,434	\$6,910,000	\$6,910,000	\$7,059,774	\$7,212,543
Approved Budget		\$2,650,000	\$0	\$0	\$0	\$0	\$0
Proposed Lifetime savings (CCM)	Not offered	Not available	19,500,000	25,000,000	19,800,000	18,000,000	14,300,000
Approved Lifetime savings (CCM)		Not available	0	0	0	0	0
TRC-Plus Ratio		Not available			1.14 (average)		

References:

2015 budget from Enbridge's Plan: Exhibit B, Tab 1, Schedule 3, Table 10

2015-2020 participants from Enbridge's IRR to BOMA.44, p. 2

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14

2016-2020 TRC-plus value from Enbridge's undertaking J8.9

### **Comments**

Almost all parties were opposed to Enbridge's program, indicating it was not costeffective and did not provide significant long-term natural gas savings. Some parties suggested that the program be approved on a pilot basis and be reviewed by the OEB at the mid-term when more information would be available.

Enbridge submitted that its proposed program provides cost-effective energy savings, leads to a wide distribution of benefits across multiple segments of the residential

market, heightens the awareness of energy efficiency in general, and leads to higher rates of participation in other programs.

## Union – Behavioural – Program Details

Behavioural - Not Approved	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed Budget			\$1,124,000	\$3,303,000	\$3,303,000	\$3,303,000	\$3,303,000
Approved Budget			\$0	\$0	\$0	\$0	\$0
Proposed Lifetime savings (CCM)	Not offered	Not offered	0	4,051,007	5,570,134	5,823,322	5,823,322
Approved Lifetime savings (CCM)			0	0	0	0	0
TRC-Plus Ratio					Less than 1		

References:

2016-2020 budgets and lifetime savings from Union's Plan: Tables 2, 3 and 6 (Exhibit A, Tab 3, Appendix A) 2016-2020 TRC-plus values from Union's IRR to SEC.32

#### <u>Comments</u>

Parties were similarly opposed to Union's proposed Behavioural program and submitted that it be rejected, or scaled back and delivered on a pilot basis until Union can demonstrate the program is a cost-effective use of funds. Parties suggested that this program be reviewed at the mid-term review.

Union submitted that its proposed program responds to two of the DSM Framework's principles and priorities, as it achieves high participation levels and relies on detailed, evidence-based customer data. Union submitted that since the Behavioural program has been proposed as part of its residential Resource Acquisition program, the cost-effectiveness considerations are unfounded as Union's overall DSM portfolio has a TRC-Plus ratio of 1.0 or greater, consistent with the DSM Framework. Union does not support proceeding with this program as a pilot program as it does not believe that a budget of \$300,000, as suggested by OEB Staff, is sufficient.

#### **Decisions**

The OEB does not approve Enbridge's proposed My Home Health Report program or Union's proposed Behavioural program. The OEB is not convinced, based on the evidence filed, that the proposed budgets are a good use of customer funds or that the programs provide value for money.

The target metrics for these programs define a residential customer who receives an energy report as a participant, regardless of whether that customer takes any action.

The OEB finds that these programs identify a new opportunity as contemplated in the DSM Framework and can be delivered to a large number of residential customers, yet lack depth and value. These programs provide information to customers through an energy report that documents the customer's energy usage. The OEB is not convinced

that the information within the energy report will trigger significant gas savings now or in the long-term.

Enbridge's pilot program in 2015 indicated that customers had a mixed reaction to energy-use comparisons between their home and other similar homes. The 2015 pilot results did not include evaluation and verification results for all program objectives, making it difficult for the OEB to conclude that the pilot program achieved its goals.

The OEB is concerned that the proposed budgets, which are the largest under both the gas utilities' Market Transformation programs, will not provide value for customers. The proposed budgets from 2015-2020 are significant at \$32M and \$14M for Enbridge and Union respectively. The OEB finds insufficient evidence- based data to assess the programs' benefits and justify the proposed budgets. Given this level of expenditure, the OEB would expect an independent party, not the program provider, to assess the pilot's results. The OEB would need to be assured that homeowners will receive the proper incentives and motivating factors to reduce their gas consumption. Since the main program deliverable is a mail insert that requires the customer to review and understand the contents, then act on their own initiative, it is not clear that the homeowner will be adequately influenced by this program.

In addition, Union's proposed \$1.8M for start-up costs in its Resource Acquisition overhead budget in 2016 related to this program is denied.

## 5.4.3 Commercial New Construction Program (similar)

#### Enbridge - Commercial Savings by Design

#### Union - Commercial Savings by Design (NEW - OEB-Approved)

The goal of the Commercial Savings by Design programs is to increase the number of new buildings (including industrial buildings) built 25% above the current Ontario Building Code standards. If builders/developers are in the design phase or earlier in the process of developing a new building, they are eligible to receive a financial incentive to use in increasing the energy efficiency of the building. Builders/developers are eligible to participate in the program multiple times for different projects.

## Enbridge – Commercial Savings by Design – Program Details

Commercial Savings by Design	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020		
Proposed & Approved Budget	\$739,435	\$969,000	\$1,345,890	\$950,000	\$1,075,000	\$1,098,300	\$1,122,068		
Proposed Participant Target - New Developments Enrolled	19	18	30	15	20	21	21		
Approved Participant Target		18	33		Formula - see section 9.4				
TRC-Plus Ratio	Not Applicable - Market Transformation New Construction Program								

References:

2014 budget from Table 8 of 2014 annual report; new developments enrolled participant metric from Table 3 of 2014 Annual Report

2015 proposed target escalates by 2% (rollover year); new developments enrolled participant metric at Enbridge's Plan: Exhibit B, Tab 1, Schedule 3, Table 8 2016-2020 budgets from Enbridge's IRR to GEC.11

Approved 2016 target is explained in section 9.3

#### **Comments**

Parties were largely supportive of Enbridge's Commercial Savings by Design program.

OEB Staff and GEC submitted that the OEB should require Union to explore developing a similar commercial new construction program within its service territory to capitalize on significant savings potential and avoid any lost opportunities.

Union submitted that it does not propose to develop a commercial new construction program and that this segment of the market is eligible to participate in its Commercial & Industrial Prescriptive and Custom programs. Union indicated that if the OEB directs it to develop a similar program to Enbridge's, Union would be willing to revisit this topic at the mid-term review after it has had an opportunity to assess its approach to market.

#### Decisions

The OEB approves Enbridge's Commercial Savings by Design program. This program is similar to Enbridge's Residential Savings by Design, with the difference being the target market is commercial and industrial buildings as opposed to residential new construction. For the same reasons as the Residential Savings by Design program, the OEB finds that this program is consistent with guiding principles of the DSM Framework and drives integrated conservation savings prior to building construction.

The OEB directs Union to establish a similar program targeting commercial and industrial buildings in its service area. The OEB finds commercial and industrial customers would expect consistency in the market, especially for province-wide chains, franchises and companies. From a customer perspective, construction companies would not expect boundaries to gas service territories to limit their ability to access conservation incentives. The OEB approves a 2016 budget of \$0.5M for Union to launch a program with a target of 8 participants. For 2017 to 2020, the OEB approves an annual budget of \$1M and expects Union to target 16 participants per year. The

OEB has calculated this target metric in proportion to Enbridge's program. The following table summarizes the OEB's decision.

## Union – Commercial Savings by Design – OEB-Approved Program Details

Commercial Savings By Design -	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020		
Approved Budget	(actuals)	(proposed)	\$500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000		
Approved Participant Target - New Developments Enrolled	Not offered	Not offered	8	Formula - see section 9.4					
TRC-Plus Ratio			Not applicable						

Note:

2017 target for new developments is based on Enbridge's 2017 budget and enrollment target for 2017. Approved 2016 target is explained in section 9.3

## 5.4.4 Enbridge – New Construction Commissioning Program

This program aims to incent builders to optimize a buildings' operational efficiency level, while still meeting the needs of the building owner and occupants.

The program incentive is offered during the building commissioning phase, which occurs after the design and construction phases. The program includes education, demonstration of savings potential, support for commissioning agents, contractors and professionals, and available financial incentives toward the cost of developing a final commissioning plan.

## Enbridge – New Construction Commissioning – Program Details

New Construction Commissioning - Not Approved	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed Budget		Not offered	\$850,000	\$925,000	\$1,000,000	\$1,020,000	\$1,040,400
Approved Budget			\$0	\$0	\$0	\$0	\$0
Proposed Participant Target - New Developments Enrolled	Not offered		20	26	28	28	28
Approved Participant Target			0	0	0	0	0
TRC-Plus Ratio			Not App	olicable - Market Tr	ansformation New	Construction P	rogram

References:

2016-2020 budgets from Enbridge's IRR to GEC.11

2016-2020 participants from Enbridge's DSM Plan:Exhibit B, Tab 1, Schedule 4

#### **Comments**

OEB Staff supported the approval of this program.

#### **Decision**

The OEB does not approve Enbridge's proposed New Construction Commissioning program. The OEB finds it is in the best interest of new building owners to ensure conservation measures installed are appropriately used. Separating the commissioning into a separate program will add costs to administer. In addition, education is part of the Savings by Design program. The OEB is not convinced a separate program targeting

the post-construction phase is warranted. If verification of gas savings is required to ensure the Savings by Design program has the anticipated impacts, the evaluation of the program could consider additional, post-construction steps as part of the evaluation process.

## 5.4.5 Enbridge – Home Rating Program

Enbridge proposes to reach out to residential customers, home energy evaluators and real estate agents to increase the awareness of a home energy rating system. Enbridge developed this program to encourage voluntary adoption of a home rating system for the resale home market. The long-term goal is for the home energy rating system to be a standard practice at the time of resale, similar to a home inspection.

## Enbridge – Home Rating – Program Details

Home Rating - Not Approved	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020		
Proposed Budget	\$979,337	\$1,353,687	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000		
Approved Budget		\$1,353,687	\$0	\$0	\$0	\$0	\$0		
Proposed Participant Target - Ratings Completed	662	4,500	596	808	982	1,128	1,252		
Approved Participant Target		4,500	0	0	0	0	0		
TRC-Plus Ratio		Not available							
References:									

2014 budget from Table 8 of 2014 Annual Report; ratings performed participant metric from Table 3 of 2014 Annual Report

2015 proposed target is based on a 2% rate of increase(rollover year); ratings completed participant metric from Enbridge's Plan: Exhibit B, Tab 1, Schedule 3, Table 2016-2020 budgets from Enbridge's IRR to GEC.11

### **Comments**

Parties provided mixed opinions related to Enbridge's Home Rating program. GEC and VECC supported the approval of this program, and GEC suggested the target number of homes be increased by 1,000.

Energy Probe was concerned with the appropriateness of this program in the absence of an Ontario legislative requirement. Alternatively, Energy Probe submitted that Enbridge could redesign the program to target home owners and inspectors, rather than real estate agents. Energy Probe suggested that without advancements in either of these areas, the OEB should not approve the continuation of this program.

Enbridge submitted that it has been in the market with this program for three years and has gained key insights and experience, including the need to engage homeowners directly.

#### Decision

The OEB does not approve Enbridge's Home Rating program. The time of sale is a unique opportunity to inform and influence customers regarding energy efficiency and upgrades that could be considered. While the OEB sees merit in the program's objectives, the OEB finds the program proposed to be too narrow in focus. The program should not be solely funded by the gas utility and should include electricity savings in the home. The OEB recommends Enbridge and Union work collectively, along with the Independent Electricity System Operator (IESO), with input from the Ministry of Energy, to determine the most appropriate and effective way to deliver an integrated home energy rating system that includes both gas and electricity.

## 5.4.6 Enbridge – Energy Compass Program

This program is a benchmarking initiative that encourages customers to effectively manage their gas consumption by identifying poorly performing facilities or operations and pinpointing how to best invest in efficiency upgrades. The upgrades would include both capital and operational improvements, to reduce a customer's overall energy costs. The goal of this program is to help customers better understand their energy usage through benchmarking comparisons, and take action to improve their own facility.

## Enbridge – Energy Compass – Program Details

Energy Compass - Not Approved	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed (shared between RA and MT&EM programs)	Not offered	Not offered	\$302,197	\$400,000	\$200,000	\$204,000	\$208,080
Approved Budgets	Not offered		\$0	\$0	\$0	\$0	\$0
TRC-Plus Ratio			Not applicable				

References:

Enbridge divided the budget for this program between Resource Acquisition (RA) and Market Transformation Energy Management (MT&EM) budget. 2016-2020 budgets from Enbridge's IRR to GEC.11

#### **Comments**

Parties did not specifically comment on this program.

#### **Decision**

The OEB does not approve Enbridge's Energy Compass Program. The OEB finds that Enbridge has not provided sufficient evidence to demonstrate the benefits of this program and has not sufficiently differentiated the program's objectives from other commercial programs.

## 5.4.7 Enbridge – School Energy Competition Program

This program proposes to educate and empower students to take action on energy use within their schools, homes and communities. Enbridge will offer education materials and workshops to all grades. It will sponsor an annual competition for grades 9-12 to produce results from a combination of operational improvements, behavioural changes, and educational competitions. To help facilitate the savings and awareness, Enbridge will provide a web-based dashboard that shows the school's gas consumption, their baseline usage prior to enrolling in the competition, and the school's consumption relative to conservation goals.

## Enbridge – School Energy Competition – Program Details

School Energy Competition	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
Proposed & Approved Budget			\$302,197	\$600,000	\$500,000	\$510,000	\$520,200	
Proposed Participant Target	Not offered	Not offered	50	60	70	80	90	
Approved Participant Target	Not offered		55	55 Formula - see section 9.4				
TRC-Plus Ratio			Not applicable					
References:								

2016-2020 budgets from Enbridge's IRR to GEC.11 Approved 2016 target is explained in section 9.3

#### **Comments**

SEC supported this program given the involvement of students as a target participant group. GEC submitted that Enbridge's School Energy Competition program be removed from its Market Transformation scorecard as it is not truly a Market Transformation program. GEC suggested that this program, like many of the others proposed by Enbridge, seeks to advance educational aspects or to test new program design concepts and should be treated as either a Resource Acquisition or pilot program to effectively judge performance. VECC noted that this program should be included for consideration at the mid-term review.

#### Decision

The OEB approves Enbridge's School Energy Competition program. The OEB finds this program provides both educational and energy conservation benefits. Further, this program is designed to engage a wide group of participants through a competition, which is innovative. The OEB also finds the involvement of students, potential future customers, to be consistent with the intent of the DSM Framework.

## 5.4.8 Enbridge – Small Commercial & Industrial Behavioural Program

This program aims to inform and educate small volume commercial and industrial customers who consume less than 100,000 m3 of natural gas per year by providing key energy usage information and communications that outline the customer's consumption levels relative to similar facilities. The goal of this program is to encourage customers to use less gas if they see that they are not as efficient as similar customers.

Enbridge – Small Commercial & Industrial Behavioural – Program Details

Small Commercial & Industrial	2014	2015	2016	2017	2018	2019	2020		
Behavioural - Not Approved	(actuals)	(proposed)			2010	2010	LOLO		
Proposed Budget					Not available				
Proposed Participants	Not offered	Not offered	7,500	7,500 Not available					
Approved Budget	Not offered	Not offered	\$0	\$0	\$0	\$0	\$0		
TRC-Plus Ratio			Not available						
Peferences:									

2016 participants from Enbridge's Plan: Exhibit B, Tab 2, Schedule 1, p. 90

#### **Comments**

OEB Staff did not support this program and submitted it should not be approved until the potential benefits be more rigorously analyzed.

#### **Decision**

The OEB does not approve Enbridge's Small Commercial & Industrial Behavioural program, although no budget was proposed. Enbridge has not provided sufficient evidence for the OEB to assess the potential benefits of this program.

## 5.4.9 Enbridge – Energy Literacy Program

The goal of this program is to provide continuous, wide-spread customer education throughout the course of the new DSM plan to increase participation in all programs, including electricity conservation programs in Ontario, and engaging customers in various ways, including interactive booths at shopping malls and video games for younger audiences.

## Enbridge – Energy Literacy – Program Details

Energy Literacy	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed Budget			\$0	\$500,000	\$500,000	\$510,808	\$521,832
Approved Budget	Not offered	Not offered	\$0	\$500,000	\$500,000	\$0	\$0
TRC-Plus Ratio					Not applicable		

References:

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14

#### Comments

Parties did not comment specifically on this program.

#### Decision

The OEB approves Enbridge's Energy Literacy program until the mid-term review. The OEB finds that the objectives of the program are consistent with the DSM Framework as the program extends the reach of conservation information, accessing potential participants through new communication channels. Enbridge is directed to work with Union and the IESO to ensure that the Energy Literacy program is comprehensive, providing customers with gas and electricity energy conservation educational information. Enbridge and Union are expected to propose an integrated program as part of the mid-term review with consistent province-wide messaging. The OEB expects the proposed budgets for 2018-2020 will enable the delivery of an integrated Energy Literacy program.

## 5.4.10 Commercial & Industrial Operational Efficiency Improvement Programs (similar)

#### Enbridge – Run-it-Right Program

#### **Union – RunSmart Program**

These programs provide smaller commercial and industrial customers with a free onsite building assessment, a report on their energy use and recommendations on how to improve their energy efficiency through operational changes. A customer's energy usage is monitored for 12 months after the completion of a site assessment using an Energy Management Information System. Participating Enbridge customers receive a financial incentive based on a building's energy consumption and complexity, whereas Union's customers receive a financial incentive based on the savings achieved over the monitoring period.

## Enbridge – Run-it-Right – Program Details

Run It Right	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed & Approved Budget (shared between RA and MT&EM programs)	\$1,488,647	Not available	\$1,510,986	\$1,720,000	\$1,900,000	\$1,941,182	\$1,983,188
Proposed Participant Target	45 [Not a metric in 2014]			86	99	114	131
Approved Participant Target		Not available	83		Formula - see	e section 9.4	
Proposed Lifetime savings (CCM)	3,125,440	Not available	303,005	421,124	592,254	768,306	907,297
Approved Lifetime savings (CCM)		Not available	333,306		Formula - see	e section 9.4	
TRC-Plus Ratio	0.29	Not available	Not available				

References

Enbridge divided the budget for this program between Resource Acquisition (RA) and Market Transformation Energy Management (MT&EM) budget. 2014 TRC, budget, participants and lifetime savings from Table 9 and Table 15 of 2014 Annual Report

2015 program did not have a participant target

2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14 Approved 2016 target is explained in section 9.3

## Union – RunSmart – Program Details

2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020	
		\$297,000	\$592,000	\$837,000	\$582,000	\$802,000	
		25	35	45	55	65	
Net eveileble	Net evelleble	28		Formula - see s	ection 9.4		
Not available	Not available	Not applicable	10%	10%	10%	10%	
		Not applicable	10%	Formul	Formula - see section 9.4		
		Not available					
	2014 (actuals)	2014 (actuals) (proposed)	2014 (actuals) (proposed) 2016   (proposed) \$297,000 25   Not available Not available 28   Not applicable Not applicable	2014 (actuals)     (proposed)     2016     2017       (proposed)     \$297,000     \$592,000     25     35       Not available     Not available     28     Not applicable     10%       Not applicable     10%     10%     10%     10%	2014 (actuals)     (proposed)     2016     2017     2018	2014 (actuals)     (proposed)     2016     2017     2018     2019	

\*Budget for the Incentives/Promotions were undifferentiated between RunSmart & SEM Note: Program was run in 2014 and 2015 but details were not available. Union did not propose a 2016 savings (%) target.

References:

2016-2020 budget, participants and savings from Union's Plan: Tables 19 and 20 (Exhibit A, Tab 3, Appendix A), Table 7 (Exhibit A, Tab 3) Approved 2016 target is explained in section 9.3

#### Comments

Parties did not make any additional submissions other than those summarized in the Overall Comments section for Market Transformation programs.

#### Decisions

The OEB approves Enbridge's Run-it-Right and Union's RunSmart programs as proposed. However, the OEB finds both to be Resource Acquisition programs as the primary objective of the programs are to achieve gas savings. Although the programs include an educational aspect related to the on-site energy assessment, the gas utilities have an expectation that there will be gas savings within 12-months from the initial assessment. The OEB finds that sufficient data is available to develop gas savings target metrics, incentive levels and calculate cost-effectiveness results. The OEB directs both utilities to re-categorize the programs as Resource Acquisition programs at the mid-term.

## 5.4.11 Commercial & Industrial Energy Management Programs (similar)

#### Enbridge – Comprehensive Energy Management Program

#### Union – Strategic Energy Management Program

These programs differ from Run-it-Right and RunSmart as they target large commercial and industrial customers<sup>3</sup>, as opposed to smaller commercial and industrial customers, and provide free on-site assessments to aid in the development of a continuous improvement and an energy management plan. Annual savings are monitored through these programs and opportunities are identified for future improvements.

The utilities provide financial incentives for the purchase and installation of energy data management and sub-metering equipment, and for achieving energy savings. Customers also receive technical support and training. These programs differ from the custom commercial and industrial Resource Acquisition programs, as the customer is encouraged to monitor and analyze their own energy use through the addition of a data management system, as opposed to installing a number of energy efficient technologies and devices.

0 1			0		0		
Comprehensive Energy Management	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
Proposed & Approved Budget (shared between RA and MT&EM programs)		\$370,000	\$513,735	\$844,045	\$1,000,000	\$1,020,000	\$1,040,400
Proposed Participant Target		Not available	6	9	10	10	10
Approved Participant Target	Not offered		7		Formula - see	section 9.4	
Proposed Lifetime savings (CCM)		Not available	869,485	1,321,771	897,856	1,075,479	1,709,498
Approved Lifetime savings (CCM)			956,434		Formula - see	section 9.4	
TRC-Plus Ratio					N/A		
Defenses							

## Enbridge – Comprehensive Energy Management – Program Details

References:

Enbridge divided the budget for this program between Resource Acquisition (RA) and Market Transformation Energy Management (MT&EM) budget.

2015 budget was part of Enbridge's incremental budget, not Enbridge's 2015 Low-Income budget, see Enbridge'S DSM Plan: Exhibit B, Tab 1, Schedule 3, Page 16. 2016-2020 budgets from Enbridge's IRR to GEC.11; lifetime savings from Enbridge's IRR to GEC.14

2016-2020 TRC values from Enbridge's DSM Plan: Exhibit B, Tab 2, Schedule 3, Tables 1 to 5

Approved 2016 target is explained in section 9.3

<sup>&</sup>lt;sup>3</sup> Enbridge eligibility requirements include Industrial customers whose annual gas consumption is between 340,000 cubic metres and 5,000,000 cubic metres. Union's eligibility requirements include that the customer has a minimum annual natural gas usage of 1,000,000 cubic metres.

## Union – Strategic Energy Management – Program Details

Strategic Energy Management	2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020		
Proposed & Approved Budget*			Bude	get approved as p	part of Performa	ance-Based Bud	get		
Proposed Participant Target		Not offered	3	5	7	C	0		
Approved Participant Target			3	Formula - see section 9.4					
Proposed Savings (%)	Not offered		Not applicable	Not applicable	5%	2018 Actual + 2%	2019 Actual + 2%		
Approved Savings (%)			Not applicable	Not applicable	5%	Formula - se	e section 9.4		
TRC-Plus Ratio - SEM					Not available				
Budget for the Incentives/Promotions were undifferentiated between RunSmart & SEM, see RunSmart Targets									

References:

2016-2020 budget, participants and savings from Union's Plan: Tables 19, 20 and 22 (Exhibit A, Tab 3, Appendix A) Proposed Savings (%) targets for 2019 and 2020 are from Union's Plan: Table 7 (Exhibit A, Tab 3, Page 32) Approved 2016 target is explained in section 9.3

#### **Comment**

Parties did not make any additional submissions other than those summarized in the Overall Comments section for Market Transformation programs.

#### Decisions

The OEB approves Enbridge's Comprehensive Energy Management and Union's Strategic Energy Management programs as proposed. However, the OEB finds both are designed to achieve gas savings, similar to the Run-it-Right and RunSmart programs. The OEB acknowledges that these programs include an educational component, but the main focus of this program is related to gas savings. The OEB directs both utilities to include a gas saving target metric at the mid-term.

### 5.5 Large Volume

Large volume customers are those with very high natural gas consumption, such as large industrial and commercial facilities. As part of the DSM Framework, the OEB concluded that rate-funded DSM programs for large volume customers should not be mandatory, because large volume customers are sophisticated and typically competitively motivated to ensure their systems are efficient. The DSM Framework also stated that the small number of customers in the large volume customer class heightened the issue of one customer subsidizing the business improvements of another. The OEB allowed Union and Enbridge to propose a fee-for-service Large Volume program if their customers showed substantial interest in receiving energy efficiency advice.

Enbridge did not propose a DSM programs for their contract-billed large volume customers.

Union proposed a new Large Volume program based on feedback from its customers. After the DSM Framework was issued, Union discontinued its prior program that enabled large volume customers to self-direct funds for energy efficiency upgrades based on a customer-specific energy plan.

#### **Union - Large Volume Program**

Union's proposed program provides large volume customers with technical support and customer training. The program does not include financial incentives. The objective is for customers to benefit from training presentations, energy efficiency calculation tools, energy use analysis, and other technical assistance from Union's Technical Account Managers.

## Union - Large Volume - Program Details

2014 (actuals)	2015 (proposed)	2016	2017	2018	2019	2020
\$4,101,725	\$3,587,000	\$400,000	\$349,000	\$373,000	\$397,000	\$421,000
	\$3,587,000	\$ 3,150,000	\$ 3,150,000	\$ 3,150,000	\$ 3,150,000	\$ 3,150,000
870,195,452	1,545,121,755	0	0	0	0	0
	1,545,121,755		Form	nula - see section	า 9.4	
4.15	Not available			Not available		
	(actuals) \$4,101,725 870,195,452	(actuals)     (proposed)       \$4,101,725     \$3,587,000       \$3,587,000     \$3,587,000       870,195,452     1,545,121,755       1,545,121,755     1,545,121,755	(actuals)     (proposed)     2016       \$4,101,725     \$3,587,000     \$400,000       \$3,587,000     \$3,150,000     \$3,150,000       870,195,452     1,545,121,755     0       1,545,121,755     0	(actuals)     (proposed)     2016     2017       \$4,101,725     \$3,587,000     \$400,000     \$349,000       \$3,587,000     \$3,150,000     \$3,150,000     \$3,150,000       \$870,195,452     1,545,121,755     0     0       1,545,121,755     Form     5     5	(actuals)     (proposed)     2016     2017     2018       \$4,101,725     \$3,587,000     \$400,000     \$349,000     \$373,000       \$3,587,000     \$3,150,000     \$3,150,000     \$3,150,000     \$3,150,000       \$870,195,452     1,545,121,755     0     0     0       1,545,121,755     Formula - see section	(actuals)     (proposed)     2016     2017     2018     2019       \$4,101,725     \$3,587,000     \$400,000     \$349,000     \$373,000     \$397,000       \$3,587,000     \$3,150,000     \$3,450,000     \$3,150,000     \$3

References:

Data was not available to calculate the 2016 target. See below for the formula.

Approved 2016 target is explained in section 9.3

Approved 2016-2020 budget is \$4 million including overheads. The approved budget shown above is \$4 million minus estimated overheads.

### **Comments**

OEB Staff recommended that the OEB approve Union's Large Volume program as proposed, subject to some reporting requirements. Some parties recommended that Union's 2013-2014 self-direct Large Volume program be continued.

Several parties representing large volume customers, including APPrO, CME and IGUA submitted that Large Volume programs should either not be offered to gas-fired electricity generators, or to any large volume customers.

Mr. Neme's evidence recommended that Union re-instate its prior self-direct Large Volume program with the following modifications:

- self-directed funds should available over a multi-year period to give customers more flexibility
- payback threshold eligibility criteria should be implemented, particularly (or perhaps exclusively) for operational improvements

<sup>2014</sup> budget from Table 3 of 2014 annual report includes program-level overheads; 2014 savings from

Table 3.2 of 2014 annual report; 2014 TRC from Table 6.1 of 2014 annual report

<sup>2015</sup> budget at Union's IRR to APPro.4; 2015 lifetime savings from 2014 annual report (includes T2/R100 and T1 metrics)

Proposed 2016-2020 budget from Union's Plan: Table 25 (Exhibit A, Tab 3, Appendix A)

• opt-out criteria should be included for customers already addressing all costeffective opportunities in their facility

Union submitted that while abandoning its existing program would involve the forgoing of associated savings, in doing so it was responsive to affected customers and complied with the OEB's direction in the DSM Framework. Union's proposed technical support and customer training program for large volume customers provides balance and is responsive to the DSM Framework, and therefore should be approved.

#### **Decision**

The OEB finds that Union's large volume customers should be a part of Union's DSM programs. The OEB was assisted by the evidence provided by Union and the expert witnesses. The OEB benefitted from the fuller evidentiary record produced in this proceeding, which was not available to the OEB at the time the DSM Framework was established.

Experience demonstrates that Union can achieve material savings through the continued delivery of its existing self-direct program, rather than a program providing only technical advice with no estimated gas savings.

The DSM Framework highlighted two concerns with mandated rate funded DSM for the large volume customer class. First, the OEB was of the view that large volume customers would already be competitively motivated to ensure that their systems were efficient. The OEB found the evidence of the expert witnesses, which was that large volume customers would not initiate all cost-effective conservation if DSM programs similar to those offered until 2015 were not available, compelling. Furthermore, the expert evidence was that in jurisdictions which offered an "opt-out" provision, large volume customers did not actively pursue all available conservation and when given the opportunity to demonstrate that they had spent an equivalent amount of money on conservation, the large volume customers did not avail themselves of this option.<sup>4</sup> Submissions from parties also made it clear to the OEB that the lost opportunity for natural gas savings from this customer segment would be substantial.

Approximately 50% of Union's CCM savings in 2013 and 2014 were as a result of savings realized from the large volume customer class.<sup>5</sup> The OEB finds it impossible to maintain a goal of achieving all cost-effective conservation, while simultaneously

<sup>&</sup>lt;sup>4</sup> EB-2015-0029 / EB-2015-0049, Exhibit L. GEC.1, p. 31

<sup>&</sup>lt;sup>5</sup> Ibid., p. 5

excluding the customer segment with the largest gas consumption and the greatest potential for savings.

In the DSM Framework, the OEB was also concerned with the issue that given the small number of customers in this customer class, there was a risk of cross-subsidization. The OEB heard evidence that in fact, given the nature of the self-direct program, all customers are provided with the opportunity to use an equal portion of the program funds for energy efficiency upgrades. This lessens, if not eliminates, the risk of cross-subsidization.

The OEB heard the concerns raised by large volume customers and generators related to cost competitiveness of rate funded DSM programs. However, the priority on increasing conservation efforts and opportunities in Ontario continues to grow. The OEB must balance the benefits of rate funded conservation activities with the costs of those activities. The OEB finds that the significant benefits of continuing Union's self-direct Large Volume program outweigh the costs of delivery and it would be inappropriate to stop a program that has been so cost-effective.

The DSM Framework also proposed an introduction of a fee-for-service program for large volume customers with the objective of trying to balance the need to continue to get CCM savings from this group without a utility-sponsored program recovered through distribution rates.

The OEB finds that large volume customers expressed no interest in a fee-for-service offering. The lack of customer interest in the fee-for-service proposal was a factor in the OEB's decision to direct the continuation of the self-direct program.

The OEB directs Union to continue its large volume self-direct program with an annual budget of \$4M for the remaining duration of the DSM Framework term, from 2016 to 2020. The OEB has inferred targets and incentives as outlined below.

The OEB will not direct Enbridge to develop a program for large volume customers. The OEB finds that Enbridge's customer mix is distinct from Union's.

The 2016 target metric for Union's Large Volume self-direct program is based on Union's 2013-2015 program results, discounted by 25% to account for a late program launch date in 2016. The approved scorecard for 2016 is as follows:

2016 Large Volume Rate T2/Rate100 Scorecard										
			Metric Target							
Program	Metrics	Lower Band	Target	Upper Band	Weight					
Large Volume Program for T2/R100 customers	Cumulative Natural Gas Savings (m <sup>3</sup> )	75% of Target	Three-year rolling average (2013-2015) Rate T2/Rate 100 cost effectiveness* x 2016 budget without overheads x 1.1 x 0.75	150% of Target	100%					

Note:

\*Cost-effectiveness = Final verified metric achievement used for LRAMVA purposes divided by final actual program spend for that year

The program's shareholder incentive is based on the proportion of the approved budget allocated to this program. The scorecard metric for this program is lifetime natural gas savings.

## 6 PILOT PROGRAMS AND TESTS

Pilots and tests were included in both Resource Acquisition and Market Transformation programs. The OEB finds the evidence regarding pilots and tests lacked clarity and that program labels were inconsistent between the utilities.

Pilot programs are new initiatives with uncertain outcomes. Pilots allow risks to be taken to try something new in a controlled manner to gauge how the market reacts. Successful pilot programs should be graduated using the pilot results to develop the roll-out. Unsuccessful pilots are learning opportunities. Active prioritization should be applied to identify the best potential pilots with the most potential for success.

Tests are marginal changes to an existing program. Tests may be changes to targeting, program criteria or incentive levels. Tests allow changes to be made without compromising or adding significant risk to the underlying program. The OEB encourages the utilities to incorporate tests to actively pursue continuous improvement for established programs. If designed and tracked appropriately, test and control groups would provide the data required to make informed roll-out decisions based on revised targets, TRC-plus ratios and incentives.

Pilots or tests could be included within Resource Acquisition, Low-income and Market Transformation programs. Pilots and tests are necessary to evolve the current portfolio of DSM programs. This year's pilots and tests may be next year's programs. With a five-year DSM planning term, a forward-looking focus is required.

# 7 ON-BILL FINANCING

In the DSM Framework, the OEB indicated that development of new and innovative programs, including flexibility to allow for on-bill financing options was one of the key priorities highlighted in the LTEP and DSM Directive. Both Union and Enbridge specifically considered on-bill financing as part of their multi-year DSM plans.

Union's customer research indicated that access to financing was not a barrier to undertaking energy efficiency programs. Their customers indicated a greater interest in incentives as opposed to on-bill financing, noting that they had access to a wide variety of financing options. Accordingly, Union did not propose any on-bill financing options as part of its 2015-2020 DSM Plan.

Enbridge did considerable research into various options for providing financing for conservation initiatives, including the new Municipal Act local improvement charge. In discussions with the Ministry of Energy, it was recognized that a utility on-bill financing option would compete with others in the marketplace. Furthermore, Enbridge expressed concern that an on-bill financing option may impact the risk profile of the utility. Alternatively, Enbridge encouraged the expansion of its Open Bill Access program that currently has approximately 83 third parties presenting their charges on Enbridge's customer bills. This includes six billers that offer financing for energy related products and services (e.g., Heating Ventilation and Air Conditioning equipment) purchased by that customer.

Parties were generally supportive of the gas utilities, particularly Union, exploring the option of on-bill financing through Enbridge's current Open Bill Access program. ED submitted that both utilities be required to implement a full on-bill financing program, highlighting many areas where it can be valuable to customers and provide a service that is not currently available.

### Decision

The OEB appreciates the investigation that was conducted by both utilities into the options to make on-bill financing available. The OEB does not view access to financing as a critical deterrent to customers participating in conservation programs. Therefore, the utilities should not assume the role of providing financing to their customers. Providing financing is beyond the current expertise of the gas utilities and has the immediate potential to detract from other conservation programs and a longer-term potential to create large amounts of bad debt. This longer-term potential of increased

utility bad debt, although an extreme example, would change the risk profile of the utility and increase costs to all customers.

However, the approach that Enbridge has followed to allow third parties to use the utility bill to charge for services provided to customers is encouraged. This has several advantages including simplifying access to financing for customers, encouraging competitive market services and avoiding any negative impacts on the utilities' risk profile. The OEB does not support the establishment of a working group to investigate other options as this would delay the expansion of the current Open Bill Access program and require additional costs.

The OEB directs Enbridge to expand access to third parties to use the utility bill for conservation related services. Further, the OEB directs Union to work with Enbridge to establish the same capability on its bills. The OEB does not anticipate that significant incremental funding will be required to implement this direction and the utilities have the ability to redirect approved program funding which should be sufficient. As part of the mid-term review, the OEB expects that an examination of the status of this initiative and any earned revenues will be undertaken.

## 8 DSM BUDGETS

Enbridge and Union have developed and requested approval of annual DSM program budgets related to all of the proposed programs included within the each gas utility DSM plan for the period of 2015 to 2020. The proposed DSM budgets include amounts related to financial incentives for customers to offset the cost of energy efficient measures, marketing and communications, administration and staffing requirements to support the programs, and evaluation of program results.

The gas utilities proposed annual budgets are outlined in the table below. The OEB discusses the proposed budgets for 2015 to 2020, and specific topics related to the approval of budgets, including cost impacts to customers throughout this section.

Proposed	Proposed Annual DSM Budgets													
Utility		2014		2015	2016		2017		2018		2019	2020	2	015-2020 Total
Enbridge	\$	32,158,764	\$	37,722,230	\$ 63,535,727	\$	73,826,882	\$	79,680,131	\$	81,273,733	\$ 82,899,208	\$ 4	418,937,911
Union	\$	32,049,450	\$	33,988,000	\$ 57,254,000	\$	56,049,000	\$	61,424,000	\$	62,464,000	\$ 64,714,000	\$ 3	335,893,000
Total	\$	64,208,214	\$	71,710,230	\$ 120,789,727	\$	129,875,882	\$	141,104,131	\$	143,737,733	\$ 147,613,208	\$ 7	754,830,911

Note: Totals exclude the maximum annual shareholder incentive of \$10.45 million / utility / year.

The OEB has made findings related to all proposed DSM programs by both Enbridge and Union. The table below shows the overall approved amounts for both Enbridge and Union throughout the 2015 to 2020 DSM term. The approval status for the individual programs, and the impact of the OEB's findings related to both annual and overall budgets, is outlined in greater detail throughout the Program section. The OEB will discuss more general budget related issues throughout the remainder of this section.

Approved	Approved Annual DSM Budgets										
Utilitv	2014 (Actuals)	2015	2016	016 2017 2018 2019		2016 2017 2019 2010 2020		2020	2015-2020		
Othily	2014 (Actuals)	2015	2010	2017	2010	2019	2020	Total			
Enbridge	\$ 32,511,266	\$ 37,722,230	\$ 56,361,117	\$ 62,933,844	\$ 67,554,087	\$ 66,421,773	\$ 67,757,376	\$ 358,750,427			
Union	\$ 33,713,172	\$ 33,988,000	\$ 56,821,373	\$ 58,570,073	\$ 63,272,305	\$ 63,268,773	\$ 64,349,541	\$ 340,270,066			
Total	\$ 66,224,438	\$ 71,710,230	\$ 113,182,490	\$ 121,503,917	\$ 130,826,393	\$ 129,690,546	\$ 132,106,917	\$ 699,020,493			
Notos:											

Notes:

2014 budgets are actuals while 2015-2020 are approved.

Excludes the maximum annual shareholder incentive of \$10.45 million / utility / year.

## 8.1 2015 Budgets

As part of the DSM Framework, the OEB outlined the overall budget guidance the natural gas utilities were expected to follow when developing their DSM plans for 2015 to 2020. The OEB indicated that 2015 would act as a transition year to the new multi-year DSM plans and that the gas utilities should carry forward and increase their 2014 DSM budgets in the same manner done from 2013 to 2014. In addition, the OEB allowed the utilities to increase their overall DSM expenditures in 2015 by up to 15% to

account for new activities to address the key priorities and guiding principles of the DSM Framework.

Both Enbridge and Union increased their DSM budgets in 2015 by applying inflation to their 2014 budgets. Enbridge increased its 2015 budget with an incremental amount of \$4.92M to address key priorities outlined in the DSM Framework, while Union proposed an incremental budget in 2015 of \$1.4M to address key priorities of the DSM Framework.

#### **Comments**

Parties generally agreed that the utilities appropriately followed the OEB's guidance to carry forward the 2014 DSM budgets into 2015. Some parties however, submitted that the OEB should make revisions to the proposed 2015 budgets.

Both SEC and OEB Staff submitted that spending of the incremental budget be ringfenced to the items specifically identified within that budget, with SEC suggesting that spending be permitted to take place in either 2015 or 2016, with any unspent funds being returned to ratepayers through the DSMVA. OEB Staff suggested that Union's DSM IT budget, for development of its DSM Tracking and Reporting System, be approved, but that the OEB indicate these amounts be ring-fenced and spent specifically on items identified within that budget.

#### Decision

The OEB approves the gas utilities proposed 2015 DSM budgets. The OEB finds that the gas utilities have appropriately carried forward their 2014 DSM budgets into 2015 and have reasonably addressed the key priorities and objectives outlined in the DSM Framework during the transition year. The OEB finds that the gas utilities can access their additional 15% DSMVA overspend in the event they are able to reach 100% of their program scorecards, consistent with provisions of the DSM Framework and Filing Guidelines. The OEB does not agree with the need to ring-fence budget amounts, as it expects the gas utilities to spend the proposed budgets in the areas indicated.

## 8.2 2016 to 2020 DSM Budgets

As part of the DSM Framework the OEB indicated that the gas utilities could expand their DSM efforts throughout the new term, but that the overall cost to the average residential customer should be no greater than approximately \$2.00/month. This annual cost to residential customers includes both overall budget and shareholder incentive amounts in order to capture the costs customers will fund through rates.

Union and Enbridge also provided overall average monthly bill impacts for residential customers. Enbridge's proposed residential budget, if approved, would result in a maximum increase of \$2.37 to a residential customer's monthly bill in 2020. Union's proposed residential budgets in 2020, if approved, would result in a monthly bill increase for its northern residential customers of \$2.36 and a monthly bill increase of \$2.12 for southern residential customers. These impacts assume that the utility receives approval for all its proposed programs, spends all of its proposed budgets in 2020 and meets all of its performance scorecard targets to earn the maximum available shareholder incentive.

#### **Comments**

Parties were generally supportive of the budget proposals put forth by the gas utilities as the overall bill impacts were in line with the \$2.00/month threshold indicated by the OEB in the DSM Framework. However, SEC was not supportive of Union's proposed annual budgets throughout the 2016 to 2020 term. GEC and ED both indicated the OEB's \$2.00/month guidance be refined, taking into consideration the analysis provided by Mr. Neme and Mr. Chernik that discussed the impact of additional avoided costs. GEC and ED submitted that by including these additional avoided costs in the calculations of cost-effectiveness and bill impacts, the result would be that both gas utilities can spend significantly greater amounts on their DSM programs without increases to customers' bills.

No other party supported the submissions from GEC and ED related to the calculation of the OEB's \$2.00/month, nor did parties support GEC's and ED's proposal of increased budgets for both Enbridge and Union beginning in 2017. Enbridge and Union both submitted that the OEB should reject the proposals put forth by ED and GEC as any additional analysis of avoided costs should be done in a more thorough manner and at a time when all the information is available.

#### **Decision**

The OEB finds that the gas utilities have appropriately applied the DSM Framework's \$2.00/month bill impact guidance as part of the proposed multi-year DSM plans. The guidance in the DSM Framework is consistent with the Minister's Directive, which states that the OEB consider other factors it deems appropriate when establishing the DSM Framework. As noted in the DSM Framework, the OEB's objectives with respect to natural gas include the requirement to protect the interests of consumers with respect to prices, reliability and quality of gas service while considering the rate impacts.

The OEB's \$2.00/month bill impact is intended to act as a general guide to ensure that impacts to customers are maintained at a reasonable level, balancing the availability of energy efficiency and conservation opportunities with additional costs to customers.

The OEB does not accept the submissions put forth by GEC and ED with respect to revising the bill impact guidance and considering additional avoided costs. The OEB is satisfied that the maximum bill impact to residential customers is consistent with the cost guidance outlined in the DSM Framework. The OEB provides further direction regarding avoided costs in Section 13: Next Five Years.

## 8.3 Overheads and Administration Costs

The overheads and portfolio administration costs received limited review during the proceeding. Utility staff salaries, employee training and development, office supplies, consulting costs, sponsorships and memberships are included in the overhead and administration costs. For Enbridge overheads in 2016 are forecast to be \$ 8.8M and administration costs are \$3.5M. Union has proposed 2016 program overhead costs of \$10.0M and administration costs, which include information system costs, of \$11.7M. Over the course of the 2016 to 2020 term, these costs continue to grow as shown in the table below.

Enbridge Overhead Budgets	2016	2017	2018	2019	2020
Proposed Program Overhead Costs	\$8,800,000	\$9,000,000	\$9,180,000	\$9,378,430	\$9,580,829
Approved Program Overhead Costs	\$7,741,021	\$7,591,961	\$7,705,214	\$7,631,813	\$7,797,828
Proposed Portfolio Overhead Costs	\$3,500,000	\$3,700,000	\$3,700,000	\$3,758,362	\$3,817,891
Approved Portfolio Overhead Costs	\$3,500,000	\$3,700,000	\$3,700,000	\$3,758,362	\$3,817,891
Total Proposed Overhead Costs	\$12,300,000	\$12,700,000	\$12,880,000	\$13,136,792	\$13,398,720
Total Approved Overhead Costs	\$11,241,021	\$11,291,961	\$11,405,214	\$11,390,175	\$11,615,719

Reference: Proposed overhead costs - Enbridge Application, Exhibit B, Tab 1, Schedule 4, Page 3-5.

Union Overhead Budgets	2016	2017	2018	2019	2020
Proposed Program Overhead Costs	\$10,023,000	\$8,342,000	\$8,505,000	\$8,524,000	\$8,542,000
Approved Program Overhead Costs	\$8,747,373	\$9,696,073	\$9,868,305	\$9,901,773	\$9,919,541
Proposed Portfolio Overhead Costs	\$11,735,000	\$6,142,000	\$5,642,000	\$5,642,000	\$5,642,000
Approved Portfolio Overhead Costs	\$11,235,000	\$5,642,000	\$5,642,000	\$5,642,000	\$5,642,000
Total Proposed Overhead Costs	\$21,758,000	\$14,484,000	\$14,147,000	\$14,166,000	\$14,184,000
Total Approved Overhead Costs	\$19,982,373	\$15,338,073	\$15,510,305	\$15,543,773	\$15,561,541

Reference: Proposed overhead costs - Union Application, Exhibit A, Tab 3, Schedule 4, Page 6.

#### Comments

LPMA expressed concern with the growing administration and overhead costs associated with both natural gas DSM, and electricity CDM program delivery. LPMA noted that there is duplication in administration and overhead costs between Union, Enbridge and the IESO. Anything that can reduce duplication should not only be encouraged by the OEB but should be mandated. LPMA submitted that the OEB should direct Union and Enbridge to look at ways they can eliminate or significantly reduce administration and overhead costs by the end of the 2015-2020 plan. LPMA suggested options such as having one distributor run the plans in the future on behalf of both distributors, or having a third party administer the programs on behalf of both distributors.

Similar concerns about the level of administration costs were expressed by GEC. SEC suggested that the utilities should be directed to benchmark these costs.

#### **Decision**

The OEB has altered the overhead budgets to be proportionately consistent with any change made to the underlying program. Where program increases have been directed, incremental overhead costs have been added. Similarly, where a program has been reduced or eliminated, the overhead costs have been altered accordingly. Most significantly, Union's start-up administrative costs associated with the Behavioural program have been declined as the program was not approved. All other administration have been approved.

The OEB found the evidence regarding administration and overhead costs did not fully describe the nature of these costs. The considerable variation, both between overhead costs for all programs and between the two gas utilities, only added to the confusion. For the mid-term, the OEB directs Enbridge and Union to provide more detailed explanation of the administration and overhead costs associated with the overall DSM plan and indicate what measures have been undertaken to increase the overall efficiency of program overhead and administrative costs. Any DSM-related costs recovered through distribution rates, outside of the DSM budget should also be identified. The gas utilities should also seek and explore all opportunities to deliver programs jointly, in an effort to reduce overhead and administration costs. The impacts of joint program design and/or delivery on overhead costs should also be provided at the mid-term review.

# 8.4 Application of Inflation by Union to Budget Amounts from 2016 to 2020

Union has proposed to apply inflation to its annual budget throughout the multi-year DSM term, similar to the practice that was done as part of its previous DSM plan from 2012 to 2014. Enbridge did not propose to apply inflation to its annual budgets from 2016 to 2020.

OEB Staff opposed Union's proposal to adjust its annual budgets for inflation and noted that it was not outlined in the DSM Framework and that the gas utilities have been enabled to significantly increase their DSM budgets, making a further increase for inflation unnecessary.

#### Decision

The OEB rejects Union's proposal to add inflation to its annual budget. The significant increase in program budgets should provide sufficient opportunity for increased efficiency and offset any inflationary pressures.

## 8.5 Cost-Efficiency Incentive

The DSM Guidelines established a Cost-Efficiency Incentive for the gas utilities. In the event that a gas utility is able to meet its overall annual natural gas savings target, the gas utility may choose to roll-forward and use any remaining approved DSM budget amounts in the following year with no subsequent impact on the approved targets for the following year.

The gas utilities are afforded greater flexibility and resources to achieve established target levels if they can efficiently produce results. Both gas utilities supported the Cost-Efficiency Incentive. Enbridge proposed establishing a new deferral account to record any amounts which become eligible to roll forward into a future year. Enbridge noted that it will record Cost-Efficiency Incentive amounts eligible to be carried forward into the following year after it achieved its overall annual natural gas savings target on a pre-audit basis. Union has proposed to calculate eligible Cost-Efficiency Incentive amounts as the total approved budget less the total actual spend, not including any amount spent from the 15% DSMVA allowance.

### Comment

OEB Staff submitted that in order to qualify for the Cost-Efficiency Incentive, the natural gas utilities must have met their overall annual natural gas savings targets from all

scorecards across the gas utilities' DSM portfolio. OEB Staff noted that due to the possibility of adjustments to the overall savings results as a function of the evaluation of the programs, it is inappropriate for the gas utilities to carry forward any eligible Cost-Efficiency Incentive amounts until the program results are final. OEB Staff did not support Union's proposed approach to calculate the Cost-Efficiency Incentive. OEB Staff submitted that any DSMVA amounts accessed by the gas utilities need to be included in the calculation of eligible unspent budget amounts.

Energy Probe asked the OEB to clarify the purpose and accounting rules for the Cost-Efficiency Incentive account proposed by Enbridge, including whether it applies to program spending or other budget surpluses and requested the necessary Accounting Orders from the gas utilities.

#### **Decision**

The OEB approves the Cost-Efficiency Incentive as originally described in the DSM Framework. For clarity, the evaluation results must be used for the calculation of the Cost-Efficiency Incentive amounts. Since the final results of DSM programs are not typically available until later in the following year, there is a process issue that needs to be resolved. In order for the Cost-Efficiency Incentive to truly act as an incentive and one that can be used by the gas utilities, the OEB agrees that a new deferral account be established, titled the Demand Side Management Cost-Efficiency Deferral Account. This deferral account will track the differences between the gas utilities' annual approved DSM budgets and the actual amount spent to achieve the total aggregate annual lifetime savings (CCM) targets made up of all 100% CCM targets across all programs. The OEB directs Enbridge, in cooperation with Union, to submit the necessary Draft Accounting Order for approval by the OEB.

## 9 DSM TARGETS

Enbridge and Union developed targets that relate to each proposed program for the 2015 to 2020 period. In accordance with the DSM Framework, the gas utilities incorporated multiple performance metrics using a weighted scorecard approach, with more focus and weight allocated to lifetime natural gas savings.

The OEB requires appropriate targets to motivate the utilities to excel in their delivery of their conservation programs. Specific topics related to the approval of targets, including 2015 and 2016-2020 target levels, proposed metrics, as well as the treatment of changing input assumptions, are discussed below.

## 9.1 2015 Metrics, Targets, and Scorecards

The OEB directed gas utilities to set targets for their 2015 DSM programs using the same methodology they used from 2012 to 2014. Both utilities followed this direction in developing their 2015 targets.

#### <u>Comment</u>

OEB Staff submitted that the utilities' proposed 2015 metrics, scorecards, and targets should be approved as filed. Three parties questioned the appropriateness of Enbridge's 2015 targets, given Enbridge's significant overachievement of its Home Energy Conservation program in 2014 and 2015, and its significant underachievement of its lifetime natural gas savings metric on the Resource Acquisition scorecard.

#### **Decision**

The OEB approves Union and Enbridge's proposed 2015 metrics and targets for all scorecards. The OEB believes that it would be inappropriate at this time to make a change to the 2015 targets with the year completed.

## 9.2 2016 to 2020 Metrics and Scorecards

The DSM Directive focused on increasing natural gas savings; however, it recognized the industry needed to look more broadly at conservation to achieve all potential savings. The DSM Framework stated that metrics and targets beyond natural gas savings should be included to motivate gas utilities to undertake activities that result in sustained, long-term results. The DSM Framework further specified that the OEB expects the gas utilities to develop balanced program scorecards that appropriately

allocate the utilities' efforts between achieving lifetime natural gas savings and addressing its other key priorities.

Both utilities proposed balanced scorecards with a heavy emphasis on cumulative natural gas savings.

Enbridge	Resource Acquisition	Low-income	Market Transformation & Energy Management
Cumulative natural gas savings metric weight	80%	90%	5%
Other metric weight	20%	10%	95%

Enbridge proposed other metrics targeting:

- Residential deep savings participants in the Home Energy Conservation program
- Project Applications in the Low-income New Construction program
- Schools enrolled in the School Energy Competition
- Participants in the Run-it-Right and Comprehensive Energy Management programs
- Builders and homes built in the Residential Savings by Design program
- New developments in the Commercial Savings by Design program
- Enrolments in New Construction Commissioning program
- Ratings completed in the Home Rating program

Union	Resource Acquisition	Low- Income	Large Volume	Market Transformation	Performance- based
Cumulative natural gas savings metric weight	75%	100%	100%	0%	0%
Other metric weight	25%	0%	0%	100%	100%

Union proposed other metrics targeting:

- Participants in the Home Reno Rebate program
- Homes built in the Optimum Home new construction program
- Participants in the RunSmart and Strategic Energy Management programs

#### <u>Comment</u>

OEB Staff recommended the addition of a small volume customer metric to Union's Resource Acquisition scorecard, similar to Enbridge's. Energy Probe recommended that Enbridge separate residential and commercial/industrial metrics within its 2016

Resource Acquisition scorecard, or else eliminate the small volume customer cumulative natural gas savings metric.

GEC made several recommendations, including removing all metrics associated with Enbridge's My Home Health Reports, School Energy Competition, Run-it-Right, Comprehensive Energy Management and New Construction Commissioning programs from the Market Transformation and Energy Management scorecard.

#### **Decision**

The OEB approves Union and Enbridge's proposed 2016-2020 metrics for all scorecards.

The OEB generally considers outcome-based performance standards to be the most relevant and appropriate when determining the success of a given activity. Lifetime natural gas savings should continue to be the primary goal of the gas utilities' DSM program efforts. Additional outcome-based metrics might be included on performance scorecards to ensure that the programs have been designed in an efficient manner and are providing the results that support the primary goal of DSM: to reduce overall natural gas consumption. The OEB suggests that the gas utilities work with stakeholders to develop options for additional outcome-based metrics for consideration at the mid-term review.

## 9.3 2016 Targets

Both utilities described their approach to developing the proposed 2016 targets using a bottom-up approach. The utilities noted particular challenges in developing target levels for new or modified programs.

#### **Comment**

Intervenors expressed concerns that the proposed targets did not increase sufficiently from 2014 given the doubling of most program budgets. Intervenors consistently recommended that the 2016 target levels be increased. Energy Probe, LPMA and VECC suggested that increases should range from 10% to 35% depending on the utility and the program.

The utilities indicated that there were several factors contributing to diminishing returns from one year to the next, including:

- the increasing challenge to attract new participants several years into a program
- higher program spend being typically less effective in cost per unit of target achieved

 increased competition for conservation investment dollars with electricity distributors given the high cost of electricity compared to gas

#### **Decision**

For 2016, the OEB has increased the proposed targets by 10% for both utilities. Where the OEB has changed a program's budget and inferred a target (see Programs - Section 5) a further 10% target increase has been applied.

The OEB acknowledges the utilities' position that there is a non-linear aspect between the rate of increase of budgets and targets. However, the OEB agrees with the intervenors that the 2016 targets are not sufficiently aggressive.

The utilities are receiving significantly higher budgets in 2016 relative to prior years, when the utilities simply rolled-forward the prior year's budgets and target metrics. Despite the significant increase in 2016 budgets, the proposed target metrics do not indicate a significant increase in performance. Furthermore, the utilities are continually gaining experience in the delivery of DSM programs. The OEB has balanced these factors and considers a 10% increase to all 2016 target metrics to be reasonable.

Targets from 2017 to 2020 are to be calculated by applying the approved formula, which is based on actual results from the prior year, as discussed in the next section of the Decision.

The following tables provide the 2016 proposed and OEB-approved 100% targets metrics by scorecard for Enbridge and Union.

	Enbridge - Scorecard Metrics, Targets & Budgets							
		2012-2014	2012-2014 2015 2016					
Resource Acquisition	Units	Average Actual Target Achievement	Target (Proposed)	Utility-Proposed Targets	Utility-proposed Targets adjusted to OEB Program Decisions	OEB Approved Targets (10% increase from Utility- Proposed adjusted for OEB Program Decisions)		
Large Volume Customers Cumulative Natural Gas Savings	ССМ	800.4	1011.9	604.2	604.2	664.6		
Small Volume Customers Cumulative Natural Gas Savings	ССМ	000.4	1011.9	290.2	290.2	319.2		
Residential Deep Savings Participants	Participants	2357	762	7508	7508	8259		
Budget including program over	heads	\$17,076,576	\$19,175,275	\$34,631,993	•	\$34,336,673		
Low-Income Single Family Cumulative Natural Gas Savings	ССМ	27.8	24.1	28.9	28.9	31.8		
Multi-Residential Cumulative Natural Gas Savings	ССМ	33.5	68.7	59.0	59.0	64.9		
Low-Income New Construction Program Participants (metric in 2015 is Proposed and Approved % Part 3 Participants Enrolled)	Project Applications	Not offered	40% (metric in 2015 only)	5	5	6		
Budget including program over	heads	\$6,669,560	\$7,632,078	\$11,895,411	•	\$11,945,410		
Market Transformation & En	ergy Managemen	t						
My Home Health Report	CCM	Not offered	N/A	19.5	0	N/A		
School's Energy Competition	Schools	Not offered	Not offered	50	50	55		
Run it Right	Participants	N/A	N/A	75	75	83		
Comprehensive Energy Management	Participants	Not offered	N/A	6	6	7		
Residential Savings by	Builders	18	18	30	30	33		
Design	Homes Built	1013	1111	2501	2501	2751		
Commercial Savings by Design	New Developments	15	18	30	30	33		
New Construction Commissioning	Enrollments	Not offered	Not offered	20	0	N/A		
Home Rating	Ratings	400	596	596	0	N/A		
Budget including program overheads		\$5,136,899	\$9,264,587	\$13,508,323		\$6,579,034		

#### Notes:

All targets shown are 100% targets.

2015 budgets include incremental budget items (Low Income new construction, My Home Health Report pilot and Comprehensive Energy Management). Lowincome metric for 2015 only is % of Part 3 Participants Enrolled, with a target of 40%.

2012-2014 budget figures are average annual budgets over the 2012 to 2014 period

2015 Proposed Budget does not include amounts from School's Energy Competition or New Construction Commissioning

The 2012-2014 market transformation budget included drain water heat recovery program until 2013.

There was not residential savings by design homes metric until 2013.

2016 budget amounts include program-level overheads but do not include portfolio-level overheads.

Run-it-Right was a program in 2012-2014 but the metric used to measure savings participation changed.

Utility-proposed Targets include the impact of OEB-approved changes to budgets (such as canceling, adding, or augmenting a program's budget), see the program section and appendices for more details on these changes.

#### References:

2012-2014 budgets from EB-2012-0394, Exhibit B, Tab 1, Schedule 2 pp. 2-3; 2012-2014 targets from ibid., p. 4

2015 budgets from EB-2015-0049, Exhibit B, Tab 1, Schedule 3, p. 5; 2015 targets come from ibid., 14-16, 2015 budgets come from Ibid., p.6.

2016 budget from EB-2015-0049, Exhibit B, Tab 1, Schedule 4, p. 3; 2016 targets come from ibid., pp. 10, 20, 29.

2012-2014 actual budget and targets were taken from annual reports.
			Union - Scoreca	d Metrics, Targets	& Budgets	
		2012-2014	2015		2016	
Resource Acquisition	Units	Average Acutal Target Achievement	Target (Proposed)	Utility-Proposed Targets	Utility-proposed Targets adjusted to OEB Program Decisions	OEB Approved Targets (10% increase from Utility- Proposed adjusted for OEB Program Decisions)
Cumulative Natural Gas Savings	CCM (millions)	923.2	816.6	1109.6	1104.3	1214.1
Home Reno Rebate Participants	Homes	424	1245	3000	3000	3300
Budget including program over	heads	\$15,585,333	\$14,022,000	\$30,825,000		\$27,927,833
Low-income						
Single Family Cumulative Natural Gas Savings	CCM (millions)	40.1	26	34.4	34.4	37.8
Social & Assisted Multi-Family Cumulative Natural Gas	CCM (millions)	16.2	17.6	14.7	14.7	16.2
Market Rate Multi-Family Cumulative Natural Gas	CCM (millions)	N/A	N/A	2.4	2.4	2.6
Budget including program over	heads	\$8,091,333	\$6,839,000	\$11,349,000		\$11,407,470
Large Volume						
T2/R100 Cumulative Natural Gas Savings	CCM (millions)	1316.6	1545.1	N/A	N/A	Section 5.29
Budget including program over	heads	\$4,420,339	\$4,534,000	\$809,000		\$4,000,000
Market Transformation Optimum Home - Homes Built	Percentage of builders' Homes built to >20% above 2012 OBC	14%	29.73%	2015 Actuals + 20%	2015 Actuals + 20%	2015 Actuals + 20%
Commercial New Construction	New Developments	N/A	N/A	N/A	N/A	8
Budget including program over	heads	\$1,104,000	\$1,379,000	\$1,042,000		\$1,703,070
Performance-Based						
RunSmart	Participants	N/A	Not Available	25	25	28
	Savings (%)*	N/A	Not Available	[2017 target] 10%	[2017 target] 10%	2017 target = 10%
Strategic Energy Management	Participants	N/A	Not Offered	3	3	3
(SEM)	Savings (%)**	N/A	Not Offered	[2018 target] 5%	[2018 target] 5%	2018 target = 5%
Budget including program over	heads	N/A	N/A	\$548,000	· · · · · · · · · · · · · · · · · · ·	\$548,000

Notes:

All targets shown are 100% targets.

\* RunSmart Savings (%) metric runs 2017-2020, \*\* SEM metric is in the scorecard from 2018-2020

Some metrics are only used starting in 2017 or 2018. In this case, the target for 2017 or 2018 is shown.

2012-2014 budget figures are average annual budgets over the 2012 to 2014 period

For the Resource Acquisition CCM metric, the updated value from the 2014 Annual Report was used.

All program budgets excluded portfolio-level costs including Research, Evaluation, and Administration.

2015-2016 market transformation metric was not used before 2014 because the program was in the start-up stages in 2012-2013.

RunSmart was a program in 2012-2014 counted but the program did not have its own metric.

2016 budget amounts include program-level overheads but do not include portfolio-level overheads.

Utility-proposed targets include the impact of OEB-approved changes to budgets (such as canceling, adding, or augmenting a program's budget), see the program section and appendices for more details on these changes.

References:

2015 program budgets from EB-2015-0029, Exhibit A, Tab 2, p. 7. 2015 low-income targets from EB-2015-0029, Exhibit A, Tab 2, p. 18.

## 9.4 2017-2020 Targets

Both gas utilities characterized their development of the proposed targets as a detailed bottom-up exercise reflecting their experience and based on the program activities over the planning period. Enbridge provided targets for each year of the DSM term while Union proposed an adjustment mechanism similar to what was used historically. Union's proposed cost-effectiveness adjustment mechanism determines an annual

target by calculating the previous year's savings total per dollar (m3/\$) and multiplying that amount, or yield, by the budget for the year in question. This type of adjustment mechanism self-corrects future year targets relative to prior year results.

## Comment

Intervenors generally rejected Union's adjustment mechanism and preferred firm target numbers for each year. LPMA supported a modified adjustment mechanism that would increase the 2% annual productivity stretch factor to 4% and expand it to include the Home Reno Rebate program. LPMA similarly suggested that adjustment mechanisms for other targets need to be more challenging.

SEC suggested that an annual target adjustment should not be accepted by the OEB unless it is an asymmetrical adjustment that increases targets to reflect higher actual performance, but not decrease targets. SEC indicated that this asymmetrical adjustment would establish a minimum level of expectations.

## **Decision**

The OEB approves an adjustment mechanism where the utilities will adjust target metric for 2017 to 2020 based on actual performance adjusted for the annual level of spending. The OEB approves Union's 2017 to 2020 cost-effectiveness adjustment mechanism with minor changes. The OEB directs Enbridge to implement the adjustment formulas described below for its target metrics. The OEB will reassess the formulaic adjustment mechanisms at the mid-term review.

Setting firm targets for the 2016 to 2020 period is particularly challenging given the dramatic increase in program funding and the introduction of new programs. Several intervenors expressed concern that the targets were not sufficiently aggressive. The potential for integration with electricity distributor conservation programs, the introduction of the Cap and Trade program in Ontario, and potentially increasing energy prices make it difficult to forecast customer adoption rates of the proposed DSM programs. Both utilities expressed concern regarding the development of longer-term targets.

For these reasons, the OEB supports the use of an adjustment mechanism to revise the targets continually for the 2017 to 2020 period relative to results. To promote continued efficiency in program delivery, the OEB agrees that there be a 2% productivity improvement factor added to both lifetime natural gas savings and participant targets over time for the Resource Acquisition and Low-income programs for both utilities. The formula for adjusting the target is:

Actual performance in year 1 / Dollars spent in year 1 x Dollars in budget year 2 x 1.02

For illustrative purposes, if the utility's 2016 actual cumulative gas savings achievement for a program is 665 million m3 with an actual spend of \$7.50M (excluding overheads) on the program, the result would be 88.67 m3 per dollar spent. To calculate the 2017 target, the 2016 result (88.67 m3/\$) will be multiplied by the 2017 budget of \$7.8M (691.6 million) times the productivity improvement of 2% equaling a 2017 target of 705.4 million m3.

The lower and upper bands are calculated by multiplying the target by 75% and 150% respectively.

In the illustration the lower band will be 529.1 million m3 (75% of 705.4 million m3) and the upper band will be 1,058.1 million m3 (150% of 705.4 million m3).

For Enbridge, in addition to developing 2017 to 2020 targets using the 2% annual productivity improvement factor to the actual budget spend and results from the prior year for the Resource Acquisition and Low-income programs, the OEB directs Enbridge to use the following adjustment mechanisms for the metrics in the Market Transformation and Energy Management scorecard. In each case, the target metrics will be based on the actual results and actual spend (without overheads) from the prior year and adjusted for the proposed budget of the current year. To promote continued efficiency in program delivery, the OEB has established a 10% productivity improvement factor for all Market Transformation and Performance-Based metrics. The productivity improvement factor is more aggressive for the Market Transformation and Performance-Based metrics as these programs tend to be newer programs with more opportunity for improvement. This is consistent with the significant increase that Union typically proposed in these metrics. The formula is:

Actual performance in year 1 / Dollars spent in year 1 x Dollars in budget year 2 x 1.1

For illustrative purposes, if the 2016 School Energy Competition metric achievement was 55 schools with an actual spend of \$0.30M (excluding overheads) on the program, the result would be 183.3 schools per million dollars spent. To calculate the 2017 target, the 2016 result (183.3 schools/\$million) will be multiplied by the 2017 school energy budget of \$0.60M (110 schools) times the productivity improvement of 10% equaling a 2017 target of 121 schools. The Lower Band will be 91 schools (75% of 121 schools) and the Upper Band will be 182 schools (150% of 121 schools).

Several of Union's formulaic targets have been revised to be consistent with the OEB's direction. Approved Market Transformation and Performance-Based target formulas are summarized in the following tables.

Metric ural Gas Savings umulative Cubic Metres) Schools Participants Participants	2017 Formulaic Target         N/A         2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1         2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 2017 program budget without overheads x 1.1         2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1         2016 metric achievement / 2016 actual program budget without overheads x 1.1         2016 metric achievement / 2016 actual program budget without overheads x 1.1
umulative Cubic Metres) Schools Participants	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1 2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1 2016 metric achievement / 2016 actual program spend without overheads x 2017
Participants	program spend without overheads x 2017 program budget without overheads x 1.1 2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1 2016 metric achievement / 2016 actual program spend without overheads x 2017
	program spend without overheads x 2017 program budget without overheads x 1.1 2016 metric achievement / 2016 actual program spend without overheads x 2017
Participants	program spend without overheads x 2017
	program budget maneut evennedde x m
Builders	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1
Homes Built	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1
v Developments	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1
Enrollments	N/A
Ratings	N/A
	Homes Built v Developments Enrollments

Actual spend is equal to the final actual spending excluding all overhead costs (program and portfolio)

	Union Target For	mulas
Market Transformation Programs	Metric	2017 Formulaic Target
Optimum Home	Percentage of builders' Homes built to (>20% above 2012 OBC	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1
Commercial New Construction	New Developments Enrolled	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1
Performance-Based Programs	Metric	2017 Formulaic Target
	Participants	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1
RunSmart	Savings (%)*	2018 formulaic target = 2017 metric achievement/ 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1
Strategic Energy	Participants	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1
Management (SEM) Participants	Savings (%)**	2019 formulaic target = 2018 metric achievement / 2018 actual program spend without overheads x 2019 program budget without overheads x 1.1

Notes:

\* RunSmart Savings (%) metric runs 2017-2020

\*\* SEM metric is in the scorecard from 2018-2020

Metric achievement is equal to the final verified program results following the annual program evaluation

Actual spend is equal to the final actual spending excluding all overhead costs (program and portfolio)

Given the limited experience with formulaic adjustment mechanisms, the utilities should suggest any necessary changes to the approved formulaic targets at the mid-term review, for 2018 to 2020.

## 9.5 Input Assumption and Net-to-Gross Changes

Input assumptions refer to engineering estimates of natural gas savings and the effective useful life of various energy efficiency measures. Net-to-gross (NTG) adjustment factors such as free ridership, spillover, and persistence, are the result of program specific evaluation studies and are applied to all DSM programs to estimate net (final) cumulative natural gas savings. The treatment of input assumptions and NTG factors to evaluate lifetime natural gas savings were discussed extensively during the proceeding.

Input assumptions define all inputs used to evaluate gross cumulative natural gas savings for prescriptive measures and programs and are to be updated in the Technical Reference Manual (TRM), which is being developed by the Technical Evaluation Committee (TEC). Updated net-to-gross ratios for DSM projects are subject to the annual evaluation process, including an on-going study by the TEC.

Input assumptions are not used to evaluate gross cumulative natural gas savings for custom programs and measures<sup>6</sup>, except for effective useful life for measures listed in the annual input assumption filings.

Three options were presented for the treatment of all input assumptions:

- The DSM Framework dictated that cumulative natural gas savings for a given program year, for the purpose of determining shareholder incentive, should be calculated using the updated input assumptions resulting from the evaluation and audit process of the same program year. This is the same treatment as is used for the calculation of lost revenues.
- Enbridge agreed with using the updated input assumptions to evaluate program savings for shareholder incentive and lost revenues as dictated by the DSM Framework, but proposed that the targets for that same program year also be revised with the updated input assumptions through a target adjustment factor (TAF).

<sup>&</sup>lt;sup>6</sup> Custom measures do not have pre-determined energy savings associated with their implementation, and are more common in industrial and commercial facilities where equipment is more specialized and operational characteristics are more variable. Custom project savings are calculated on a case-by-case basis, although measure life may be assumed based on typical lifetimes of that type of equipment.

3. Union proposed different approaches to determine cumulative natural gas savings for the purpose of calculating lost revenues, shareholder incentives, and inputs for their next year's formulaic targets. For lost revenues and for calculating next year's formulaic targets, cumulative natural gas savings would be evaluated using updated input assumptions as dictated in the DSM Framework. For shareholder incentives, Union proposed that the old input assumptions be used to evaluate cumulative natural gas savings for a given year, and not be updated as a result of the evaluation and audit process which happens the year after. Union proposed to apply any input assumption changes resulting from the Technical Reference Manual (TRM) and the Net-to-Gross (NTG) study to its savings in 2016 on a go-forward basis.

The result of both the Enbridge and Union's proposals are that targets and results would be evaluated using the same input assumptions and adjustment factors. This approach would neutralize the impact of revisions to input assumptions on shareholder incentive so utilities assume no risk if input assumptions were found at some point to be incorrect or outdated.

#### **Comments**

OEB staff and intervenors generally supported continuing with the treatment proposed in the DSM Framework. Mr. Woolf agreed that there was no major reason to deviate from the OEB's current evaluation policies on the application of input assumptions.

Mr. Neme explained that it may be appropriate to lock in the input assumptions and netto-gross factors for prescriptive programs and not update these values based on evaluation and audit results. On the other hand, Mr. Neme noted that utilities have more control over the measures installed and free ridership rates in custom programs, where projects are developed on a case-by-case basis.

## **Decision**

The OEB is modifying the treatment of input assumptions and net-to-gross adjustment factors effective 2015. The OEB has considered the evidence and submissions and agrees with expert witness, Mr. Neme, that input assumptions for prescriptive measures should not be adjusted retroactively based on the results of the annual evaluation process for the purpose of determining eligible shareholder incentive amounts.

The OEB finds that any updates to existing input assumptions, or new input assumptions identified during a year, should be applied prospectively when evaluating savings from prescriptive measures.

The OEB does not expect the gas utilities to rely on predetermined net-to-gross adjustment factors when calculating savings for custom projects.

There are three uses of input assumptions and net-to-gross adjustment factors in the evaluation of savings. The first is the use of input assumptions and net-to-gross adjustment factors to determine final savings results for the purpose of determining shareholder incentives, as just described above. The second is the use of the input assumptions and net-to-gross adjustment factors to calculate the next year's targets. The third is the use of the input assumptions and net-to-gross adjustment factors to calculate to calculate the next year's targets.

To calculate next year's targets, the OEB directs the utilities to use the new, updated input assumptions and net-to-gross factors that are the result of the annual evaluation process. The OEB finds it appropriate to use the best available information to determine subsequent targets for prescriptive programs.

To calculate lost revenues, the OEB directs the utilities to use the final natural gas savings amounts calculated from the use of the best available information that are the result of the annual evaluation process. It is appropriate to use the best available information when determining lost revenues that are the result of DSM programs as this will provide the best indication of the actual effect of the programs and is needed when comparing this amount with the load reduction amounts included in the gas utilities' load forecast.

## 9.6 Scorecard Achievement Levels

The DSM Framework directed the gas utilities to provide three levels of achievement for each target metric within each performance scorecard: one at 75%, 100% and 150%. Enbridge followed this direction in its Application. Union proposed an upper level of 125% to achieve the maximum shareholder incentive. Union submitted that the 150% would not be achievable with only a 15% budget overspend permitted once the utility had reached 100% of its target. Union argued that if targets are beyond reach, then they would not motivate the utility to strive to reach the targets and would act as a disincentive.

## <u>Comment</u>

Some intervenors agreed with Union's proposal to use 125% as the upper achievement level and suggested that Enbridge should also have an upper achievement level of 125%. Other intervenors agreed with the DSM Framework; that 150% was an

appropriate level as it should be a significant challenge for the utility to achieve the maximum shareholder incentive since they have the ability to earn \$10.45M.

#### Decision

The upper achievement level of 150% is consistent with the DSM framework, for both utilities. The OEB does not approve Union's proposal to use 125% as the upper achievement level. Union's upper achievement level will be 150% of the approved 100% target metrics, calculated in the same manner as Enbridge.

The 150% upper achievement level is intended to motivate the gas utilities to be aggressive in their program delivery in order to maximize results. The OEB does not agree with Union's argument that the funding level must match the upper achievement level. Providing additional funding in order to meet an achievement level over and above the 100% target will not challenge the utility to be more effective in delivering their programs and efficient in how they use their approved DSM budgets. Enbridge's description of the 150% achievement level as a significant challenge is consistent with the OEB's expectations.

## **10 SHAREHOLDER INCENTIVE**

## 10.1 2015 Shareholder Incentive

The DSM Framework specified that utilities should roll-forward their 2014 DSM plans, and that the utilities should increase their shareholder incentive amounts in the same manner as was done throughout the 2012-2014 DSM Framework.

Both utilities have proposed 2015 maximum shareholder incentive amounts equal to the 2014 maximum shareholder incentive amount, escalated by approximately 2% to account for inflation. The 2015 maximum shareholder incentive amount for Enbridge is \$11.09M and \$11M for Union.

#### **Comment**

VECC and OEB Staff submitted that the utilities should not be allowed to increase their 2015 maximum shareholder incentive above \$10.45M, as this was the maximum shareholder incentive specified in the DSM Framework.

#### Decision

The OEB is satisfied that Union and Enbridge have reasonably interpreted the DSM Framework as it relates to 2015 shareholder incentive amounts, and approves them as filed. While the DSM Framework precludes the application of an inflation factor to shareholder incentives on a go-forward basis, for 2015, the utilities were advised to increase shareholder incentive amounts in the same manner as they did throughout the preceding DSM Framework. As a result, it was reasonable for the utilities to assume that an inflation factor could be added to the 2014 shareholder incentive to establish the incentive level in 2015.

## **10.2 Balanced Scorecards**

Both utilities proposed balanced scorecards as required by the DSM Framework.

The utilities also proposed metrics for both lifetime natural gas savings (CCM) and participation rates and weightings for these metrics within each scorecard. The shareholder incentive allocation per scorecard followed the overall DSM budget allocation, as directed by the DSM Framework.

The proposed scorecards and metric weightings are as follows:

## Enbridge Gas Distribution Proposed Targets

	Resource Acqu	isition S	corecard		Resource Acquisition Scorecard													
Metric	Units	Weight	100% of Target															
Wietric	Units	weight	2016	2017	2018	2049	2020											
Metrics and Targets																		
Large Volume Customers	CCM (millions)	40%	604	601	614	616	618											
Small Volume Customers	CCM (millions)	40%	290	365	414	431	447											
Residential Deep Savings	Participants	20%	7,508	10,000	12,346	12,948	13,478											

	Low Income Scorecard												
Metric	Units	Weight	100% of Target										
Wethe	Onits	weight	2016	2017	2018	2019	2020						
Metrics and Targets													
Single Family Ontario Building Code (Part 9)	CCM (millions)	45%	28.9	30.3	30.3	30.0	29.7						
Multi-residential Ontario Building Code (Part 3)	CCM (millions)	45%	59.0	62.0	69.7	71.5	73.3						
Low Income New Construction	Project Applications	10%	5.0	7.0	9.0	8.0	5.0						

	Market Transfor	mation	Scorecard				
Metric	Units	Weight		10			
Weth	Units Weight		2016	2017	2018	2019	2020
Metrics and Targets							
Home Health Report	CCM (millions)	5%	19.5	25.0	19.8	18.0	14.3
School's Energy Competition	Schools	5%	50	60	70	80	90
Run it Right	Participants	20%	75	86	99	114	131
Comprehensive Energy Management	Participants	20%	6	9	10	10	10
Residential Savings by Design	Builders	10%	30	20	22	23	25
Residential Savings by Design	Homes Built	15%	2,501	2,250	2,295	2,341	2,388
Commercial Savings by Design	New Developments	15%	30	15	20	21	21
New Construction Commissioning	Enrollments	5%	20	26	28	28	28
Home Rating	Ratings	5%	596	808	982	1,128	1,252

## Union Gas Proposed Targets

Resource Acquisition Scorecard											
Metric	Units	Weight	2016 Target								
Metrics and Targets											
Cumulative Savings	CCM (millions)	75%	1,110								
Home Reno Rebate Participants	Homes	25%	3,000								

Low Income Scorecard												
Metric	Units	Weight	2016 Target									
Metrics and Targets	-											
Single Family Cumulative Savings	CCM (millions)	60%	34									
Social & Assisted Multi-Family Cumulative Savings	CCM (millions)	35%	15									
Market Rate Multi-Family Cumulative Savings	CCM (millions)	5%	2									

Market Transformation Scorecard											
Metric Units Weight 2016 Targe											
Metrics and Targets											
Homes built >20% above code	Homes	100%	2015 Actual +20%								

	Performa	nce Bas	ed Sco	recard	1			
Metric	Units		We	ighting			2016	2017-2018 Targets
Weth	Onits	2016	2017	2018	2019	2020	Target	2017-2018 Targets
Metrics and Targets	-							
RunSmart Participants	Participants	50%	20%	10%	10%	10%	25	125% of Prior Year Actual
SEM Participants	Participants	50%	20%	10%			3	2+Prior Year Actual
RunSmart Savings (%)	m3		60%	40%	40%	40%		10% Aggregate Participant Savings
SEM Savings (%)	m3			40%	50%	50%		2018: 5%; 2019-2020: 102% of Prior Year Actual

#### Comments

GEC suggested that Enbridge separate residential, commercial and industrial lifetime natural gas savings metrics in the 2016 Resource Acquisition scorecard, and allocate the weightings of 20% and 60% respectively (with 20% reserved for Residential Home Energy Conservation participation).

SEC proposed that the maximum annual shareholder incentive for each utility be increased to \$12M. This would include \$8M of shareholder incentive allocated to the scorecards, and an additional \$4M of discretionary shareholder incentive amounts made available for leadership and innovation, assessed at the same time as the clearance of DSM deferral and variance accounts.

#### Decision

The target metric weightings proposed by the utilities within each scorecard are consistent with the DSM Framework that encourages lifetime natural gas savings but also encourages reaching out to new conservation participants. Union's proposed weightings for the Performance-Based category change throughout the 2016-2020 term. The OEB approves the proposed change in weightings as it demonstrates the programs are expected to evolve over time. The OEB used these scorecards with the modifications identified in the programs and target sections above to develop revised scorecards. The OEB-approved scorecards are included in the Appendices of the Decision.

Regarding the allocation of incentives between scorecards, only SEC proposed a significant change. While SEC's proposed approach appropriately increases the focus on innovation and cooperation to achieve a shareholder incentive, the approach is

highly subjective: an approach that the OEB does not accept. The OEB will consider options to increase the focus on innovation at the mid-term.

## **10.3 Maximum Performance on Individual Metrics**

Although the DSM Framework capped shareholder incentive achievement at 150% at the scorecard level, there are no limits on the incented performance of individual metrics within the scorecards. Historically, the utilities' performance on individual metrics has varied widely, and at times individual metrics have contributed disproportionately to scorecard achievement.

#### <u>Comments</u>

Intervenors expressed concern that the balance of the targeted scorecards will be lost, and recommended that the OEB cap maximum performance related to any individual metric. Four parties recommended 150% as the cap, while GEC submitted that the cap be limited to 175% of the metric target. SEC further recommended a 0% minimum score.

Union agreed that it would be reasonable for the OEB to implement a maximum achievement cap of 200%, but if implemented, the OEB should set a corresponding minimum achievement cap of 0% for unsuccessful metrics. Enbridge urged the OEB not to place a cap on individual metrics, arguing that the mechanisms within the scorecard weighting and the overall scorecard achievement limits were sufficient.

#### Decision

The OEB agrees that the lack of guidance on upper and lower achievement limits on individual metrics jeopardizes the balanced approach that the scorecards are designed to achieve. The OEB approves maximum and minimum achievement limits per metric of 200% and 0%, respectively.

## 11 INTEGRATION AND COORDINATION OF NATURAL GAS DSM AND ELECTRICITY CDM PROGRAMS

In the DSM Framework, the OEB identified many benefits associated with the coordination and integration of programs with the electricity and gas distributors. The increased efficiency of program delivery, the clarity of common messaging, and consistency of input assumptions were some examples of the benefits. The customer would definitely benefit from one source for conservation investments and assistance. The DSM Framework also recognized the challenge of coordination with many electricity distributors and suggested that the gas utilities work with the former Ontario Power Authority (OPA), now the new IESO.

Despite the direction provided by the DSM Framework, neither Union nor Enbridge offered any major initiatives or coordinated programs. While the gas utilities indicated there was some cooperation with selected electricity distributors, there was no indication that the gas utilities, either together or individually, explored a coordinated effort with the OPA/IESO.

## **Comments**

Intervenors agreed that cooperation and integration of gas and electricity conservation is ideal, as it will lead to greater benefits for the customer and allow programs to be more cost-effective. Some intervenors suggested that adaptive thermostats, home energy conservation or sustainable energy technologies are logical areas for cooperation.

OEB Staff proposed to add a new collaboration scorecard to encourage cooperation with LDCs with a weight of 10% of the shareholder incentive. OEB Staff proposed three potential metrics:

- 1. Percent of LDCs the gas utilities have partnered with for at least one joint program
- 2. Percent of DSM programs delivered in collaboration with LDCs
- 3. Percent of natural gas customers who have participated in a collaborative program with LDCs

SEC suggested, and Enbridge agreed, that Enbridge's proposed Collaboration and Innovation Fund be modified. Rather than \$1M being made available within each year of the six-year plan, \$6M should be made available throughout the overall term of the six-year plan in order to provide flexibility and address important opportunities when presented.

## Decision

The OEB is concerned with the progress that the gas utilities have made related to collaboration with electricity distributors. The focus has been on meetings in various forums but has yielded no material programs or integrated programs for customers. The OEB continues to believe that customers would benefit from a single contact to address both gas and electricity conservation.

The OEB encourages Union and Enbridge to meet jointly with the IESO with the objective of developing and jointly implementing a conservation program. The OEB anticipates that it will take several meetings to develop and pilot new integrated programs. At the mid-term review, the gas utilities should be in a position to report on the progress made in developing integrated conservation programs. The OEB expects at least one jointly offered program to be available in the market by the mid-term review. The utilities should consider using a common "solution provider" for a residential conservation program.

The OEB approves Enbridge's proposed budget for collaboration and innovation of \$6M in 2015-2020 and Union's \$2.5M budget for "pilot" programs in 2016-2020.

In the event that sufficient progress is not made in the area of integrated conservation programming by the mid-term, the OEB will consider prescriptive measures at that time.

## **12 FUTURE INFRASTRUCTURE PLANNING ACTIVITIES**

As indicated in the DSM framework, it is appropriate that the gas utilities study and submit a methodology for assessing the appropriate role for DSM as part infrastructure planning at the mid-term DSM review. The OEB has directed the gas utilities to provide evidence on whether they considered DSM as an alternative to infrastructure development at the preliminary stage of project approvals. The utilities require specific detail on the location and the forecasts for load growth to assess the potential for DSM to replace an infrastructure project.

Despite the strong interest of the government and the obvious direct benefit if new build can be delayed or avoided, both utilities could not identify any development project that had been affected by conservation activities. The utilities were not optimistic regarding the role DSM might play in the future. The utilities highlighted that they use instantaneous, or hourly peak demand, to plan distribution infrastructure, but use peak day demand for gas supply planning. Peak day demand already takes into account DSM program volume reduction because it is based on the previous winter's actual daily measured volumes. However, the impact of current broad-based DSM on peak hour demand is not clear or proven, as DSM programming does not currently target hourly peak demand reductions or specific network areas.

## Comment

Enbridge provided an outline of its integrated resource planning (IRP) activities study. Some intervenors and expert witnesses suggested enhancements to the Enbridge study proposal, including:

- a) Enbridge should develop its first integrated resource plan in a timely fashion, and should allow time for stakeholder feedback and input.
- Enbridge should incorporate best practices from electricity IRP in its gas IRP study, as appropriate.
- c) Union should work with Enbridge and within Enbridge's protocols for IRP development.
- d) Enbridge should investigate the potential for demand response programs to address gas infrastructure needs.
- e) Both utilities should have at least one on-the-ground case study launched as a pilot program by the end of 2016.
- f) Enbridge should investigate the role that new construction programs, both residential and commercial, can play in addressing infrastructure needs.

- g) Enbridge should modify the avoided cost inputs to its cost-benefit screening practice, but does not need to develop a new screening test.
- h) Enbridge and Union should work together to develop consistent IRP Scope Studies, and consistent IRP Studies.

#### Decision

The OEB recognizes the challenge that it has given the gas utilities, to avoid new build by implementing selectively targeted DSM. The OEB agrees that a case study, as proposed by Enbridge, would assist in assessing the merits of a transition plan. However, the OEB is concerned that the time required to complete a case study would delay the utilities' infrastructure planning activities proposal and the transition plan would not be available in time for the mid-term review.

The OEB directs Enbridge and Union to work jointly on the preparation of a proposed transition plan that outlines how to include DSM as part of future infrastructure planning activities. The utilities are to follow the outline prepared by Enbridge, and should consider the enhancements suggested by the intervenors and expert witnesses. The transition plan should be filed as part of the mid-term review.

## **13 MID-TERM REVIEW**

In the DSM Framework, the OEB established a mid-term review expectation. The midterm review was to assess performance on annual metrics, budget levels, impact on customer rates and shareholder incentives. The mid-term review will also allow the OEB to consider the DSM Framework relative to the overall energy conservation landscape, including any new or revised government direction.

During the proceeding, parties and the utilities made suggestions as to what might be incorporated into the mid-term review and the appropriate timing. There was also a concern expressed by some that the current proceeding has taken considerable time and effort and the Decision would not materially change at the mid-term.

#### Decision

The OEB provides the following guidance and requirements regarding the mid-term review. While the OEB agrees that this proceeding has been lengthy, the OEB anticipates that many changes may occur before the mid-term review. These include:

- the cap-and-trade program
- the updated natural gas conservation potential study
- DSM's role in infrastructure planning study
- the revised building code
- new program results, including joint CDM/DSM initiatives.

Throughout the Decision, the OEB has explicitly indicated requirements that the gas utilities must file at the mid-term review. A list of these requirements is included in the Appendices. The utilities will be required to file all completed studies and reports at the mid-term review. These include:

- Infrastructure Resource Planning study
- Natural Gas Conservation Potential study
- Report on free rider reduction efforts and results across all programs
- On-bill presentment status report
- Joint studies and initiatives with electric utilities

While cost-effectiveness screening and avoided costs are important considerations in pursuing all cost effective DSM, the OEB does not expect that there will be sufficient experience with cap-and-trade at the mid-term review to set a new direction for screening DSM programs. In addition, the gas utilities are not expected to have the

capability to expand the DSM programs to the extent of delivering all cost-effective programs prior to the end of this five-year term.

Prior to the mid-term review, the OEB, through the annual evaluation process, and with advice and input from the newly formed DSM Evaluation Advisory Committee, will be monitoring the performance of Enbridge's and Union's programs.

The DSM Framework targets June 1, 2018 as the date for completion of the mid-term review. The OEB will provide further details regarding the mid-term review closer to that date.

## **14 NEXT FIVE YEARS**

The current DSM term concludes at the end of 2020, consistent with the Minister's DSM Directive. The mid-term review of the 2015 to 2020 DSM term should establish more specific direction for future DSM filing requirements. In advance of the mid-term review, the OEB is providing some general observations from its review of the current DSM Plan Applications.

The opportunity for collaborative work among the gas and electric utilities, along with the IESO, is expected to result in a number of new joint programs. The OEB expects enhanced joint energy conservation programs will reduce customer confusion and improve the efficiency of program delivery. The OEB expects this to be an area that the gas utilities explore and pursue aggressively over the course of this DSM term, with design details of the joint programs initially provided as part of the mid-term review.

Avoided distribution costs were examined extensively during this proceeding. Several parties provided recommendations on areas of improvements in calculating the avoided costs that result from DSM programs. Considerable time was spent reviewing and updating a summary table proposed by one of the expert witnesses. The OEB expects the utilities to provide a transparent calculation of the avoided costs and a list of the input assumptions that go into this calculation. Given the different geography, system and customers between Union and Enbridge, it is expected that the avoided cost calculation will be specific to each utility; however, the methodology, approach and presentation should be the same for both gas utilities.

The cost impact of DSM programs for a customer was discussed during the proceeding. Some parties suggested that this cost impact be shown as a net rate impact, and both the benefits and the costs of the DSM programs be included in the same calculation. The OEB suggests the gas utilities consider a net rate impact approach further. Some areas to consider include: the sample (e.g., years, participants, customers, etc.) required to reasonably consider the benefits and costs to customers, price forecasts used, demand reduction impact on price, among others. This analysis should be presented to the OEB as part of the gas utilities' next multi-year DSM plans.

The OEB did not find the sensitivity information submitted by the gas utilities to be helpful in determining the impacts of increased budgets on target metrics such as gas savings and participation levels. The sensitivity analysis was too vague to provide the OEB with any assistance in its review of proposed DSM budget levels and options to redirect components of the DSM plans. The OEB expects the gas utilities to provide more details of any future sensitivity analysis related to DSM budgets levels at the program level.

## 15 PROGRAM EVALUATION (INCLUDING ADJUSTMENT FACTORS)

In the DSM Framework, the OEB indicated that it expected to take a more active role in program evaluation, measurement and verification during the 2015 to 2020 period. On August 21, 2015, during the oral hearing, the OEB described its new role for program evaluation and established roles for an Evaluation Contractor (EC) and an Evaluation Advisory Committee (EAC) in a letter.<sup>7</sup>

Given the new evaluation process, the OEB directs the gas utilities to track all utility spending related to any utility-initiated work undertaken to develop the utility's annual DSM results for the OEB. Similarly, the gas utilities should track all OEB-related costs for evaluation work initiated by the OEB and the OEB's Evaluation Contractor. In summary, the gas utilities should track costs related to work undertaken by both the utility and centrally through the OEB to determine the total annual evaluation costs.

The OEB will not provide any further direction in the Decision.

<sup>&</sup>lt;sup>7</sup> Ontario Energy Board Letter, EB-2015-0245, August 12, 2015.

## **16 ACCOUNTING TREATMENT**

## 16.1 Accounting Treatment – Need for New Deferral and/or Variance Accounts

OEB Staff suggested that the utilities establish new variance accounts to track the budgeted and actual costs related to the natural gas conservation potential study and evaluation activities. Enbridge supported the establishment of these new accounts, but suggested they be combined in one account for simplicity. Union did not support the establishment of the natural gas conservation potential study variance account as it is able to track these costs through the DSMVA.

#### Decision

The OEB approves Enbridge's and Union's proposed budgets for DSM evaluation and the natural gas conservation potential study. The OEB will not approve new variance accounts to track the expenditures related to the natural gas conservation potential study and evaluation activities. The OEB finds that the current DSMVA is a sufficient and an appropriate mechanism to track variances from the budgeted expenditures.

The OEB approves new deferral accounts for Enbridge and Union related to the Cost-Efficiency Incentive. As indicated in the Cost-Efficiency Incentive section of the Decision, the OEB approves the Cost-Efficiency Incentive as originally described in the DSM Framework. The OEB indicated that a new deferral account be established, titled the Demand Side Management Cost-Efficiency Deferral Account. This deferral account will track the differences between the gas utilities' annual approved DSM budgets and the actual amount spent to achieve the total aggregate annual lifetime savings (CCM) targets made up of all 100% CCM targets across all programs. The OEB finds that a new deferral account is required as its purpose is distinct from the current DSMVA. The OEB directs Enbridge, in cooperation with Union, to submit the necessary Draft Accounting Order for approval by the OEB.

## **17 IMPLEMENTATION**

# 17.1 Union's proposal to pool DSM costs among its Rate M4, Rate M5 and Rate M7 customers

Union has proposed to pool the DSM costs recoverable from its Rate M4 (Firm Industrial and Commercial Contract Rate), Rate M5 (Interruptible Industrial and Commercial Contract Rate), and Rate M7 (Large Volume Industrial and Commercial Rate) customers in order to address rate eligibility changes approved by the OEB in Union's 2013 Cost of Service rate proceeding (EB-2011-0210). Union has proposed this pooling method of recovering DSM costs for 2016 to 2018 across these three customer classes as it does not believe that the current allocation is reasonable. Union indicated that it is proposing the same approach for ratemaking purposes from 2016 to 2018.

## **Comments**

Parties supported Union's proposal to pool the costs to these commercial and industrial customers. CME noted that Union should be required to report on the actual programs and resulting costs incurred by each of these rate classes as part of the mid-term review. OEB Staff supported the pooling approach noting that it will more appropriately recover DSM costs from the appropriate customers.

#### Decision

The OEB approves Union's proposal to pool the DSM costs recoverable from its Rate M4, Rate M5 and Rate M7 customers for 2016 to 2018. The OEB agrees that this proposal appropriately addresses rate eligibility changes approved by the OEB in Union's 2013 Cost of Service proceeding.

(Intentionally blank)

## 18 ORDER

## THE BOARD ORDERS THAT:

- 1. Enbridge Gas Distribution Inc. is ordered to implement its 2015 to 2020 DSM Plan, as set out in the Decision.
- 2. Union Gas Limited is ordered to implement its 2015 to 2020 DSM Plan, as set out in the Decision.
- Enbridge Gas Distribution Inc. and Union Gas Limited may provide written comments related to the calculation of target metric and allocation of shareholder incentive amounts included in Schedule A, B, and C no later than February 3, 2016. After reviewing the comments, the OEB will either confirm the original amounts or issue a decision with any changes by February 17, 2016.
- 4. Enbridge Gas Distribution Inc. and Union Gas Limited shall file a Draft Accounting Order for the Demand Side Management Cost-Efficiency Incentive Deferral Account with the OEB no later than **February 3, 2016**.
- 5. OEB Staff shall file any comments on the Draft Accounting Order with the OEB, and forward to both Enbridge Gas Distribution Inc. and Union Gas Limited, no later than **February 10, 2016**.
- 6. Enbridge Gas Distribution Inc. and Union Gas Limited shall file a revised Accounting Order for the Demand Side Management Cost-Efficiency Incentive Deferral Account no later than **February 17, 2016**.
- 7. Eligible parties shall submit their cost claims no later than **14 days** from the date of issuance of this Decision and Order.
- 8. Enbridge Gas Distribution Inc. and Union Gas Limited shall file with the OEB, and forward to all parties, any objections to the claimed costs within **28 days** from the date of issuance of this Decision and Order.
- 9. Parties shall file with the OEB, and forward to Enbridge Gas Distribution Inc. and Union Gas Limited, any responses to any objections for cost claims within **35 days** from the date of issuance of this Decision and Order.

10. Enbridge Gas Distribution Inc. and Union Gas Limited shall pay the OEB's costs incidental to his proceeding upon receipt of the OEB's invoice.

All filings to the OEB must quote the file numbers, **EB-2015-0029 / EB-2015-0049**, be made through the OEB's web portal at

https://www.pes.ontarioenergyboard.ca/eservice/, and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at www.ontarioenergyboard.ca/OEB/Industry. If the web portal is not available, parties may email their documents to the address below. Those who do not have internet access are required to submit all filings on a CD in PDF format, along with two paper copies. Those who do not have computer access are required to file 7 paper copies.

All communications should be directed to the attention of the Board Secretary at the address below, and be received no later than 4:45 p.m. on the required date.

## **Ontario Energy Board**

P.O. Box 2319 2300 Yonge Street, 27th Floor Toronto ON M4P 1E4 Attn: Ms. Kirsten Walli Board Secretary Tel: 1-888-632-6273 (toll free) Fax: 416-440-7656 BoardSec@ontarioenergyboard.ca

With respect to distribution lists for all electronic correspondence and materials related to this proceeding, parties must include the Case Manager, Valerie Bennett at <u>valerie.bennett@ontarioenergyboard.ca</u> and OEB Counsel, Michael Millar at <u>michael.millar@ontarionenergyboard.ca</u>.

DATED at Toronto January 20, 2016

## **ONTARIO ENERGY BOARD**

Original Signed By

Kirsten Walli Board Secretary

## SCHEDULE A

## **DECISION AND ORDER**

## APPROVED ANNUAL BUDGETS AND TARGETS FOR ALL PROGRAMS

## **ENBRIDGE GAS DISTRIBUTION INC.**

(EB-2015-0049)

UNION GAS LIMITED

(EB-2015-0029)

**JANUARY 20, 2016** 

				En	bridge Gas	Distributio	on Inc. 2016	6 to 2020 D	SM Budget	and Targe	ets						
Resource Acquisition	2016 Proposed Budget	2016 OEB Approved Budget	2016 Proposed CCM Targets	2016 OEB Approved CCM Targets	2016 Proposed Participant Targets	2016 OEB Approved Participant Targets	2017 Proposed Budget	2017 OEB Approved Budget	2018 Proposed Budget	2018 OEB Approved Budget	2019 Proposed Budget	2019 OEB Approved Budget	2020 Proposed Budget	2020 OEB Approved Budget	Total Proposed Budget (2016-2020)	Total OEB Approved Budget (2016-2020)	Reference for Changes in the Decision (Section)
Home Energy Conservation	\$ 12,148,317	\$ 12,148,317	102,622,499	112,884,749	7,508	8,259	\$ 15,180,000	\$ 15,180,000	\$ 18,000,000	\$ 18,000,000	\$ 18,360,000	\$ 18,360,000	\$ 18,727,200	\$ 18,727,200	\$ 82,415,517	\$ 82,415,517	5.2.1
Residential Adaptive Thermostats	\$ 876,371	\$ 876,371	23,864,839	26,251,323			\$ 1,525,000	\$ 1,525,000	\$ 2,175,000	\$ 2,175,000	\$ 2,218,500	\$ 2,218,500	\$ 2,262,870	\$ 2,262,870	\$ 9,057,741	\$ 9,057,741	5.2.2
Commercial & Industrial Prescriptive	\$ 2,196,952	\$ 2,196,952	133,443,276	146,787,604			\$ 2,241,134	\$ 2,241,134	\$ 2,232,905	\$ 2,232,905	\$ 2,277,564	\$ 2,277,564	\$ 2,323,114	\$ 2,323,114	\$ 11,271,669	\$ 11,271,669	5.2.4
Commercial & Industrial Direct Install	\$ 4,955,421	\$ 4,955,421	60,358,661	66,394,527			\$ 5,060,872	\$ 5,060,872	\$ 4,758,344	\$ 4,758,344	\$ 4,853,510	. , ,	\$ 4,950,581	\$ 4,950,581	\$ 24,578,728		5.2.5
Commercial & Industrial Custom	\$ 7,020,664		572,893,403	630,182,743			\$ 7,157,145	\$ 7,157,145	\$ 7,361,562	\$ 7,361,562	\$ 7,508,793	\$ 7,508,793	\$ 7,658,968	\$ 7,658,968	\$ 36,707,132	\$ 36,707,132	5.2.6
Small Commercial New Construction - Revised	\$ 396,933						* ,,	\$ 1,305,566			\$ 2,444,762		\$ 2,493,657	\$-	\$ 9,037,743		5.2.7
Energy Leaders (Large & Small C/I) - Revised as PILOT	\$ 400,000	\$ 400,000					\$ 600,000	\$ 400,000		\$ 400,000	· · ·		\$ 832,320	\$ -	\$ 3,448,320		5.2.8
Energy Compass (RA portion) - Rejected	\$ 252,032	\$-	N/A				\$ 333,600	\$-	\$ 166,800		\$ 170,136	\$-	\$ 173,539	\$-	\$ 1,096,107		5.4.6
Run It Right (RA portion)	\$ 1,260,162	\$ 1,260,162	303,005	333,306			\$ 1,434,480	\$ 1,434,480	\$ 1,584,600	\$ 1,584,600	\$ 1,618,946	\$ 1,618,946	\$ 1,653,979	\$ 1,653,979	\$ 7,552,167	\$ 7,552,167	5.4.10
Comprehensive Energy Management (RA portion)	\$ 48,805	+ -,=	869,485	956,434			\$ 80,184	\$ 80,184	\$ 95,000	\$ 95,000	+	\$ 96,900	\$ 98,838	\$ 98,838	\$ 419,727		5.4.11
Resource Acquisition Program Budget	\$ 29,555,657	\$ 29,303,625							\$ 39,571,035						. , ,	\$ 176,210,746	
Resource Acquisition Overhead - Revised	\$ 5,076,336	\$ 5,033,048.21					\$ 5,183,539	\$ 5,104,327	\$ 5,479,056	\$ 5,249,479	\$ 5,597,856	\$ 5,122,057	\$ 5,719,034	\$ 5,232,967	\$ 27,055,821	\$ 25,741,878	
Resource Acquisition Total	\$ 34,631,993	\$ 34,336,673	894,355,168	983,790,685			\$ 40,101,520	\$ 39,488,708	\$ 45,050,090	\$ 43,162,456	\$ 45,962,966	\$ 42,056,270	\$ 46,894,100	\$ 42,908,517	\$ 212,640,672	\$ 201,952,624	
Low-Income																	
Home Winterproofing - <i>Revised</i>	\$ 5,756,064	\$ 5,806,064	28,900,000	31,790,000			\$ 6,240,000	\$ 6,290,000	\$ 6,427,200	\$ 6,477,200	\$ 6,555,744	\$ 6,605,744	\$ 6,686,859	\$ 6,736,859	\$ 31,665,867	\$ 31,915,867	5.3.1
	\$ 3,279,028	\$ 3,279,028	59,000,000	64,900,000			\$ 3,418,121	\$ 3,418,121	\$ 3,813,296	\$ 3,813,296	\$ 3,889,562	\$ 3,889,562	\$ 3,967,353	\$ 3,967,353	\$ 18,367,360	\$ 18,367,360	5.3.4
Low-Income New Construction	\$ 1,116,696	\$ 1,116,696			5	6	\$ 1,200,000	\$ 1,200,000	\$ 1,400,000	\$ 1,400,000	\$ 1,428,000	\$ 1,428,000	\$ 1,456,560	\$ 1,456,560	\$ 6,601,256	\$ 6,601,256	5.3.5
Low-Income Program Budget	\$ 10,151,789	\$ 10,201,788					\$ 10,858,121	\$ 10,908,121	\$ 11,640,496	\$ 11,690,496	\$ 11,873,306	\$ 11,923,306	\$ 12,110,772	\$ 12,160,772	\$ 56,634,483	\$ 56,884,483	
Low-Income Overhead - Revised	\$ 1,743,622	\$ 1,743,622					\$ 1.611.877	\$ 1,619,299	\$ 1.611.758	\$ 1.618.681	\$ 1.646.597	\$ 1.653,531	\$ 1,682,133	\$ 1,689,078	\$ 8,295,987	\$ 8,324,211	
Low-Income Total	\$ 11,895,411	\$ 11,945,410	87,900,000	96,690,000			\$ 12,469,998	\$ 12,527,420	\$ 13,252,254	\$ 13,309,177	\$ 13,519,903	\$ 13,576,837	\$ 13,792,905	\$ 13,849,850	\$ 64,930,470	\$ 65,208,694	
Market Transformation & Energy Management																	
Residential Savings by Design	\$ 3,250,842	\$ 3,250,842			2501 (30)	2751 (33)	\$ 3,250,000	\$ 3,250,000	\$ 3,250,000	\$ 3,250,000	\$ 3,320,443	\$ 3,320,443	\$ 3,392,296	\$ 3,392,296	\$ 16,463,581	\$ 16,463,581	5.4.1
My Home Health Report - Rejected	\$ 3,913,434	\$-	19,500,000	-			\$ 6,910,000	\$-	\$ 6,910,000	\$-	\$ 7,059,774	\$-	\$ 7,212,543	\$-	\$ 32,005,751	\$-	5.4.2
Commercial Savings by Design	\$ 1,345,890	\$ 1,345,890			30	33	\$ 950,000	\$ 950,000	\$ 1,075,000	\$ 1,075,000	\$ 1,098,300	\$ 1,098,300	\$ 1,122,068	\$ 1,122,068	\$ 5,591,258	\$ 5,591,258	5.4.3
New Construction Commissioning - Rejected	\$ 850,000	\$-			20		\$ 925,000	\$-	\$ 1,000,000	\$-	\$ 1,020,000	\$-	\$ 1,040,400	\$-	\$ 4,835,400	\$-	5.4.4
Home Rating - <i>Rejected</i>	\$ 1,100,000	\$-			596		\$ 1,100,000	\$-	\$ 1,100,000	\$-	\$ 1,100,000	\$-	\$ 1,100,000	\$-	\$ 5,500,000	\$-	5.4.5
Energy Compass (MTEM portion) - <i>Rejected</i>	\$ 50,165	\$-					\$ 66,400	\$-	\$ 33,200	\$-	\$ 33,864	\$-	\$ 34,541	\$-	\$ 218,170	\$-	5.4.6
School's Energy Competition	\$ 302,197	\$ 302,197			50	55	\$ 600,000	\$ 600,000	\$ 500,000	\$ 500,000	\$ 510,000	\$ 510,000	\$ 520,200	\$ 520,200	\$ 2,432,397	\$ 2,432,397	5.4.7
Small Commercial and Industrial Behavioural - Rejected	N/A						N/A	\$-	N/A	\$-	N/A	\$-	N/A	\$ -	N/A	\$-	5.4.8
Run It Right (MTEM portion)	\$ 250,824	\$ 250,824			75	83	\$ 285,520	\$ 285,520	\$ 315,400	\$ 315,400	\$ 322,236	\$ 322,236	\$ 329,209	\$ 329,209	\$ 1,503,189	\$ 1,503,189	5.4.10
Comprehensive Energy Management (MTEM portion)	\$ 464,930	\$ 464,930			6	7	\$ 763,861	\$ 763,861	\$ 905,000	\$ 905,000	\$ 923,100	\$ 923,100	\$ 941,562	\$ 941,562	\$ 3,998,453	\$ 3,998,453	5.4.11
Market Transformation Program Budget	\$ 11,528,281	\$ 5,614,683					\$ 14,850,781	\$ 5,849,381	\$ 15,088,600	\$ 6,045,400	\$ 15,387,718	\$ 6,174,079	\$ 15,692,818	\$ 6,305,335	\$ 72,548,199	\$ 29,988,878	-
Market Transformation Overhead - Revised	\$ 1,980,042	\$ 964,351					\$ 2,204,584	\$ 868,335	\$ 2,089,187	\$ 837,054	\$ 2,133,977	\$ 856,225	\$ 2,179,663	\$ 875,783	\$ 10,587,453	\$ 4,401,747	
Market Transformation & Energy Management Total	\$ 13,508,323	\$ 6,579,034	19,500,000	0			\$ 17,055,364	\$ 6,717,716	\$ 17,177,787	\$ 6,882,454	\$ 17,521,695	\$ 7,030,304	\$ 17,872,481	\$ 7,181,118	\$ 83,135,652	\$ 34,390,625	
5 5 5		\$ 45,120,096							\$ 66,300,131			. , ,		. , ,	\$ 314,767,529		
		\$ 7,741,021							\$ 9,180,000								
		\$ 52,861,117					\$ 69,626,882										
	\$ 3,500,000						\$ 3,700,000		\$ 3,700,000			\$ 3,758,362			\$ 18,476,253		
		\$ 1,500,000					\$ 1,700,000		\$ 1,700,000								
		\$ 1,000,000							\$ 1,000,000								
	\$ 1,000,000	\$ 1,000,000							\$ 1,000,000								
Energy Literacy - Revised	\$ -	A 50 004 4/5	4 004 755 465	4 000 400 007			\$ 500,000		*,	. ,	,		\$ 521,832	•	\$ 2,032,640		5.4.9
GRAND TOTAL	\$ 63,535,727	\$ 56,361,117	1,001,755,168	1,080,480,685			\$ 73,826,882	<b>\$ 62,933,844</b>	\$ 79,680,131	<b>\$ 67,554,087</b>	\$ 81,273,733	\$ 66,421,773	\$ 82,899,208	\$ 67,757,376	\$ 381,215,687	\$ 321,028,197	
	Change																

					Union Ga	s Limited 20	16 to 2020 I	DSM Budg	ets and Targ	gets							
	2016	2016	2016	2016	2016	2016	2017	2017	2018	2018	2019	2019	2020	2020	Total	Total	Reference
	Proposed	OEB	Proposed	OEB	Proposed	OEB Approved	Proposed	OEB	Proposed	OEB	Proposed	OEB	Proposed	OEB	Proposed	OEB Approved	Changes in
Accourse Acquisition Besidential	Budget	Approved	CCM Targets	Approved CCM Targets	Participant	Participant	Budget	Approved	Budget	Approved	Budget	Approved	Budget	Approved	Budget	Budget	Decision (Section)
Resource Acquisition - Residential	\$ 7,233,000	Budget \$ 7,233,000	77,950,500	85,745,550	Targets 3,000	Targets 3,300	\$ 9,880,000	Budget \$ 9,880,000	0 \$ 12,226,000	Budget \$ 12,226,000	\$ 12,226,000	Budget \$ 12,226,000	\$ 12,226,000	Budget \$ 12,226,000	(2016-2020) \$ 53,791,000	(2016-2020) \$ 53,791,000	(Section) 5.2.1
	\$ 389,000	\$ -	11,990,584	-	3,000	5,500	\$ 387,000			\$ -	\$ 386,000	\$ 12,220,000	\$ 386,000	\$ 12,220,000	\$ 1,934,000	. , ,	5.2.3
	\$ 1,124,000	\$-	-				\$ 3,303,000		\$ 3,303,000	\$-	\$ 3,303,000	\$-	\$ 3,303,000	\$-	\$ 14,336,000		5.4.2
Residential Resource Acquisition Program Budget	\$ 8,745,000	\$ 7,233,000					\$ 13,569,000	\$ 9,880,000	\$ 15,916,000	\$ 12,226,000	\$ 15,916,000	\$ 12,226,000	\$ 15,916,000	\$ 12,226,000	\$ 70,061,000	\$ 53,791,000	
Residential Overhead (Evaluation & Administration) - Revised	\$ 3,400,000	\$ 1,378,657					\$ 1,780,000	\$ 1,488,828	3 \$ 1,930,000	\$ 1,681,697	\$ 1,930,000	\$ 1,681,697	\$ 1,930,000	\$ 1,681,697		. , ,	
Development and Start-up - Revised	\$ 1,850,000	\$ -					<b>6 7</b> 00.000	\$ -	0 050 000	\$ -	<b>6</b> 050 000	\$ -	<b>6</b> 050 000	\$ -	\$ 1,850,000		
Evaluation Administrative costs - <b>Revised</b>	\$ 559,000 \$ 991,000	,,					\$ 709,000 \$ 1,071,000	,,			\$ 859,000 \$ 1.071.000	\$ 859,000 \$ 822,697	\$ 859,000 \$ 1.071.000	\$ 859,000 \$ 822.697			
	\$ 12,145,000		89,941,084	85,745,550			<i> </i>	, .,	3 \$ 17,845,000	, ,		. ,		, ,,,,	\$ 81.031.000	, ,,.	
	φ 12,140,000	φ 0,011,001	00,011,001	00,140,000			φ 10,040,000	φ 11,000,020	φ 11,040,000	φ 10,001,001	φ 11,040,000	φ 10,001,001	φ 11,040,000	φ 10,007,007	φ 01,001,000	φ 01,700,070	
Resource Acquisition - Commercial & Industrial																	
Commercial & Industrial Prescriptive	\$ 6,755,000	\$ 6,755,000	274,596,193	302,055,812			\$ 6,763,000	\$ 6,763,000	\$ 7,486,000	\$ 7,486,000	\$ 7,149,000	\$ 7,149,000	\$ 7,149,000	\$ 7,149,000	\$ 35,302,000	\$ 35,302,000	5.2.4
	\$500,000 (pilot)			6,699,181			\$500,000 (pilot)			\$ 2,500,000		\$ 2,500,000		\$ 2,500,000			5.2.5
Commercial & Industrial Custom (Studies & Metering)		\$ 7,808,000	745,094,379	819,603,817				\$ 7,808,000		\$ 7,808,000	\$ 7,808,000	· /···/···	\$ 7,808,000		\$ 39,040,000	+	5.2.6
	\$ 14,562,000								\$ 15,293,000	<u> </u>	· · · ·		\$ 14,957,000			1 1 1 1 1 1 1 1	
Commercial & Industrial Overhead - Revised Evaluation	\$ 4,118,000 \$ 189,000	\$ 4,253,176 \$ 189,000					\$ 4,265,000 \$ 189.000	, ,,.	, , ,	\$ 4,931,584 \$ 189.000		\$ 4,946,286 \$ 189,000	\$ 4,265,000 \$ 189,000	\$ 4,946,286 \$ 189.000	\$ 21,178,000 \$ 945,000	. , ,	
Administrative costs - Revised	,,	\$ 4,064,176					\$ 4.076.000	,,	,,	,,	,,		\$ 4,076,000	, ,	, , , , , , , , , , , , , , , , , , , ,	,,	
	. , ,	. , ,	1,019,690,572	1,128,358,810			\$ 18,836,000	7 .,,	\$ 19,558,000	. , ,	. , ,		. , ,	\$ 22,403,286	\$ 95,518,000	· , ,	]
Resource Acquisition Total							\$ 34,185,000	<u> </u>	2 \$ 37,403,000		+ -/ /	, , ,	+ -) /			,,,.	-
Performance-Based			101														1
Dursement	¢ 007.000	¢ 007.000		(% savings; no			¢ 500.000	¢	¢ 007.000	¢ 007.000	¢ 500.000	¢	¢ 000.000	¢ 000.000	C 0.110.000	¢ 0.410.000	
RunSmart	\$ 297,000			• •	25	28	\$ 592,000	\$ 592,000	\$ 837,000	\$ 837,000	\$ 582,000	\$ 582,000	\$ 802,000	\$ 802,000	\$ 3,110,000	\$ 3,110,000	5.4.10
	(budget		(% savings; no			_	***	. **	* ***	***	***	ىلىنىنى ئەتىنى	***	***	* ***	***	
Strategic Energy Management (SEM) Performance-Based Program Budget	included above) in	,	0 /	2016 target)	3	3	\$ 592.000			\$ 837,000		\$ 582,000		\$ 802,000			5.4.11
Performance-Based Overhead	\$ 297,000 \$ 251.000	\$ 297,000 \$ 251.000					\$ <u>592,000</u> \$ <u>251.000</u>	<i>ii</i> _ <i>i</i>			\$ 582,000 \$ 251,000	\$ <u>562,000</u> \$ 251,000		\$ <u>251.000</u>		+ -, -,	
	\$ 35,000	\$ 35,000					\$ 35,000	, . ,	, . ,	, ,,,,,,	\$ 35,000	\$ 35,000	· · · · · · · · · · · · · · · · · · ·	\$ 35,000	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	
Administrative costs	\$ 216,000	\$ 216,000					\$ 216,000			\$ 216,000	\$ 216,000			\$ 216,000			
Performance-Based Total	\$ 548,000	\$ 548,000					\$ 843,000	\$ 843,000	\$ 1,088,000	\$ 1,088,000	\$ 833,000	\$ 833,000	\$ 1,053,000	\$ 1,053,000	\$ 4,365,000	\$ 4,365,000	-
Low Income	· .											-		-			
	\$ 6,285,000	• • • • • • • • • • • •	32,772,265	36,049,492			\$ 6,086,000	• • • • • • • • • • •			\$ 8,013,000		* -/- /				5.3.1
5	+ -,	\$ 8,000 \$ 761,000	N/A	N/A			\$ 419,000 \$ 784,000	• • • • • • • • •		• • /•••	\$ 456,000	. ,	\$ 448,000	• • • • • • •			5.3.2
Furnace End-of-Life Multi-Family	\$ 761,000 \$ 2,651,000	. ,	1,578,960 17,141,672	1,736,856 18,855,839			\$ 784,000 \$ 3,359,000	,		. ,	\$ 919,000 \$ 3,031,000	. ,		. ,			5.3.3 5.3.4
	\$ 9.705.000		17,141,072	10,000,000			\$ 10.647.000					\$ 12.469.000		\$ 13.312.000			0.0.4
Low income Overhead - Revised		\$ 1,652,470					\$ 1,637,000	1	1 1 1 1 1 1 1 1	\$ 1,656,954	+ / /////	\$ 1,675,720	4 - 7 - 7	\$ 1,693,488			
Evaluation	\$ 219,000	\$ 220,128					\$ 212,000	\$ 213,015	5 \$ 225,000	\$ 225,948	\$ 244,000	\$ 244,982	\$ 262,000	\$ 263,008	\$ 1,162,000	) \$ 1,167,082	
Administrative costs		\$ 1,432,342					\$ 1,425,000	1 1 - 1		1 1 - 1	\$ 1,425,000			\$ 1,430,480			
Low Income Total	\$ 11,349,000	\$ 11,407,470	51,492,897	56,642,187			\$ 12,284,000	\$ 12,342,841	\$ 13,514,000	\$ 13,570,954	\$ 14,088,000	\$ 14,144,720	\$ 14,948,000	\$ 15,005,488	\$ 66,183,000	\$ 66,471,473	
Leave Melane																	
Large Volume	¢ 100.000 1	A 150 000		Operations 5 00			¢ 040.000	¢ 0.450.000	¢ 070.000	¢ 0.450.000	¢ 007.000	¢ 0.450.000	¢ 404.000	¢ 0.450.000	¢ 4.040.000	¢ 45 750 000	5.5
Large Volume - Revised	\$ 400,000	\$ 3,150,000 \$ 850,000		Section 5.29			\$ 349,000 \$ 409,000	,,		\$ 3,150,000	\$ 397,000	\$ 3,150,000		\$ 3,150,000	\$ 1,940,000 \$ 2,045,000		5.5
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b>	\$ 409,000	\$ 850,000		Section 5.29			\$ 409,000	\$ 850,000	\$ 409,000	\$ 850,000		\$ 850,000	\$ 409,000	\$ 850,000	\$ 2,045,000	\$ 4,250,000	5.5
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b> Evaluation - <b>Revised</b>	\$ 409,000 \$ -	\$ 850,000 \$ 63,000		Section 5.29			\$ 409,000 \$ -	\$ 850,000 \$ 63,000	) \$ 409,000 ) \$ -	\$ 850,000 \$ 63,000	\$ 409,000 \$ -	\$ 850,000 \$ 63,000	\$ 409,000 \$ -	\$ 850,000 \$ 63,000	\$ 2,045,000 \$ -	\$         4,250,000           \$         315,000	5.5
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b>	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000		Section 5.29 Section 5.29			\$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	0     \$     409,000       0     \$     -       0     \$     409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 2,045,000 \$ - \$ 2,045,000	\$         4,250,000           \$         315,000           \$         3,935,000	5.5
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b> Evaluation - <b>Revised</b> Administrative costs - <b>Revised</b>	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000					\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	0     \$     409,000       0     \$     -       0     \$     409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 2,045,000 \$ - \$ 2,045,000	\$         4,250,000           \$         315,000           \$         3,935,000	5.5
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b> Evaluation - <b>Revised</b> Administrative costs - <b>Revised</b>	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000					\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	0     \$     409,000       0     \$     -       0     \$     409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000	\$ 2,045,000 \$ - \$ 2,045,000	\$         4,250,000           \$         315,000           \$         3,935,000	5.5
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b> Evaluation - <b>Revised</b> Administrative costs - <b>Revised</b> Large Volume Total Market Transformation	\$ 409,000 \$ - \$ 409,000 \$ 809,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000				+ 2015 Actuals +	\$ 409,000 \$ - \$ 409,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000	\$     409,000       \$     -       \$     409,000       \$     783,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000	\$     4,250,000       \$     315,000       \$     3,935,000       \$     20,000,000	
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b> Evaluation - <b>Revised</b> Administrative costs - <b>Revised</b> Large Volume Total Market Transformation Optimum Home - <b>Revised</b>	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000			2015 Actuals + 20%		\$ 409,000 \$ - \$ 409,000 \$ 758,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000	\$     409,000       \$     -       \$     409,000       \$     783,000       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 841,000	\$     4,250,000       \$     315,000       \$     3,935,000       \$     20,000,000       \$     4,205,000	5.4.1
Large Volume - <b>Revised</b> Large Volume Overhead - <b>Revised</b> Evaluation - <b>Revised</b> Administrative costs - <b>Revised</b> Large Volume Total Market Transformation Optimum Home - <b>Revised</b> Commercial Savings By Design - <b>New</b>	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 500,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 1,000,000	\$     409,000       \$     -       \$     409,000       \$     783,000       \$     783,000       \$     -       \$     -       \$     -       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 1,000,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 1,000,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 1,000,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 841,000 \$ -	\$     4,250,000       \$     315,000       \$     3,935,000       \$     20,000,000       \$     4,205,000       \$     4,500,000	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 841,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 500,000 \$ 1,341,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000	2     \$     409,000       2     \$     -       3     \$     -       409,000     \$     783,000	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         841,000           \$         1,000,000           \$         1,841,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 1,000,000 \$ 1,841,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 1,000,000 \$ 1,841,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 841,000 \$ - \$ 841,000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 4,205,000         \$ 4,500,000         \$ 8,705,000	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 841,000 \$ - \$ 841,000 \$ - \$ 201,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 500,000 \$ 1,341,000 \$ 362,070					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000	\$     409,000       \$     -       \$     409,000       \$     -       \$     409,000       \$     783,000       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 441,000 \$ - \$ 841,000 \$ 201,000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 2,350,350	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 841,000 \$ - \$ 201,000 \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 500,000 \$ 1,341,000 \$ 362,070 \$ 26,820					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 1,841,000 \$ 36,820	\$     409,000       \$     -       \$     409,000       \$     783,000       \$     783,000       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 4,000,000 \$ 1,841,000 \$ 1,841,000 \$ 4,97,070 \$ 36,820	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,841,000           \$         4,97,070           \$         36,820	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         36,820	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 841,000 \$ - \$ 841,000 \$ - \$ 841,000 \$ - \$ 841,000 \$ -	\$     4,250,000       \$     315,000       \$     3,935,000       \$     20,000,000       \$     4,205,000       \$     4,205,000       \$     4,500,000       \$     8,705,000       \$     2,350,350       \$     174,100	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 500,000 \$ 1,341,000 \$ 362,070 \$ 26,820 \$ 335,250					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250	\$     409,000       \$     -       \$     409,000       \$     -       \$     409,000       \$     783,000       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,841,000           \$         497,070           \$         36,820           \$         460,250	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,91,000 \$ 3,91,000 \$ 3,91,000 \$ 3,91,000 \$ 3,000 \$ 3,0000 \$ 3,00000 \$ 3,00000 \$ 3,00000 \$ 3,000000 \$ 3,000000 \$ 3,000000 \$ 3,0000000 \$ 3,000000000000000000000000000000000000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 4,205,000         \$ 4,500,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 2,176,250	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 841,000 \$ 500,000 \$ 1,341,000 \$ 362,070 \$ 26,820					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 1,841,000 \$ 36,820 \$ 460,250	\$     409,000       \$     -       \$     409,000       \$     -       \$     409,000       \$     783,000       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 4,000,000 \$ 1,841,000 \$ 1,841,000 \$ 1,841,000 \$ 36,820	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,841,000           \$         4,97,070           \$         36,820	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         36,820	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,91,000 \$ 3,91,000 \$ 3,91,000 \$ 3,91,000 \$ 3,000 \$ 3,0000 \$ 3,00000 \$ 3,00000 \$ 3,00000 \$ 3,000000 \$ 3,000000 \$ 3,000000 \$ 3,0000000 \$ 3,000000000000000000000000000000000000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 4,205,000         \$ 4,500,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 2,176,250	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total MT budget	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 500,000 \$ 1,341,000 \$ 362,070 \$ 26,820 \$ 335,250 \$ 1,703,070					\$     409,000       \$     -       \$     409,000       \$     758,000       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 36,820 \$ 460,250 \$ 2,338,070	\$     409,000       \$     -       \$     409,000       \$     -       \$     409,000       \$     783,000       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -       \$     -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,900,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         1,841,000           \$         497,070           \$         36,820           \$         460,250           \$         2,338,070	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,41,000           \$         1,62,070           \$         36,820           \$         460,250           \$         2,338,070	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,00000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,00000 \$ 3,995,0000 \$ 3,995,00000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,0000 \$ 3,995,00000 \$ 3,995,00000 \$ 3,995,00000 \$ 3,995,00000 \$ 3,995,00000 \$ 3,995,00000 \$ 3,995,000000 \$ 3,995,0000000000000000000000000000000000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 4,205,000         \$ 4,500,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 2,176,250	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total MT budget Total Program Budget without Overheads	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ 1,042,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 4,000,000 \$ 500,000 \$ 1,341,000 \$ 362,070 \$ 26,820 \$ 335,250 \$ 1,703,070 \$ 36,839,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000	2     \$     409,000       2     \$     -       3     409,000       5     783,000       5     -       0     \$       1     \$       2     \$       2     \$       3     -       3     -       4     \$       5     -       6     \$       7     \$       7     \$       8     -       9     \$       9     \$       9     \$	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         4,97,070           \$         4,62,250           \$         2,338,070           \$         47,762,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         1,841,000           \$         497,070           \$         36,820           \$         460,250           \$         47,725,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,41,000           \$         4,97,070           \$         4,92,070           \$         4,92,250           \$         2,338,070           \$         48,788,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 2,045,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ 1,042,000 \$ 1,042,000 \$ 208,188,000 \$ 43,936,000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 174,100         \$ 2,176,250         \$ 11,055,350         \$ 224,346,000         \$ 224,346,000         \$ 4,133,066	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total Program Budget without Overheads Total Program Budget with Program-level Overhead	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 1,042,000 \$ 10,023,000 \$ 44,573,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 4,000,000 \$ 1,341,000 \$ 1,341,000 \$ 1,341,000 \$ 362,070 \$ 26,820 \$ 335,250 \$ 1,703,070 \$ 36,839,000 \$ 8,747,373 \$ 45,586,373					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 9,696,073 \$ 52,928,073	2     \$     409,000       2     \$     -       2     \$     409,000       3     \$     783,000       3     \$     -       3     \$     -       4     \$     -       5     \$     -       5     \$     -       5     \$     -       5     \$     -       5     \$     -       5     \$     -       5     \$     -       5     \$     -       5     \$     -       6     \$     5.05,000       5     \$     \$       6     \$     \$	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 47,762,000 \$ 9,868,305 \$ 57,630,305	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 497,070 \$ 460,250 \$ 2,338,070 \$ 47,725,000 \$ 9,901,773 \$ 57,626,773	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 460,250 \$ 2,338,070 \$ 48,788,000 \$ 9,919,541 \$ 58,707,541	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 2,01,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 2,045,000 \$ 3,985,000 \$ 3,91,000 \$ 3,91,000 \$ 3,936,000 \$ 3,936,000 \$ 3,936,000 \$ 3,936,000 \$ 3,936,000 \$ 2,01,000 \$ 3,936,000 \$ 3,936,000 \$ 2,01,000 \$ 2,01,200 \$ 3,936,000 \$ 2,02,124,000 \$ 2,02,124,000 \$ 2,02,124,000 \$ 2,02,124,000 \$ 2,02,124,000 \$ 2,022,124,000 \$ 2,000 \$ 3,000 \$ 3,0000 \$ 3,0000 \$ 3,0000 \$ 3,00	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,500,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 2,176,250         \$ 11,055,350         \$ 224,346,000         \$ 48,133,066         \$ 272,479,066	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total MT budget Total Program Budget without Overheads Total Program Budget with Program-level Overhead Portfolio-level Overhead - Revised	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 34,550,000 \$ 10,023,000 \$ 44,573,000 \$ 11,735,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 4,000,000 \$ 500,000 \$ 1,341,000 \$ 362,070 \$ 26,820 \$ 362,070 \$ 26,820 \$ 36,839,000 \$ 3,747,373 \$ 45,586,373 \$ 45,586,373 \$ 11,235,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 497,070 \$ 36,820 \$ 497,070 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 9,696,073 \$ 52,928,073 \$ 5,642,000	2     \$ 409,000       2     \$ -       3     409,000       2     \$ -       3     \$ 783,000       3     \$ -       0     \$ -       1     \$ -       2     \$ -       3     \$ -       3     \$ 8,505,000       3     \$ 5,642,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 47,762,000 \$ 47,762,000 \$ 5,763,0305 \$ 5,5642,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 5,622,00 \$ 5,642,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,841,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 460,250 \$ 460,250 \$ 48,788,000 \$ 9,919,541 \$ 58,707,541 \$ 56,42,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ - \$ 841,000 \$ - \$ 841,000 \$ 201,000 \$ - \$ - \$ 201,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 174,100         \$ 2,176,250         \$ 11,055,350         \$ 224,346,000         \$ 224,346,000         \$ 4,133,066	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total Program Budget without Overheads Total Program Budget with Program-level Overhead Protfolio-level Overhead - Revised Research	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 841,000 \$ - \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ 1,042,000 \$ 10,023,000 \$ 44,573,000 \$ 44,573,000 \$ 11,735,000 \$ 1,550,000 \$ 1,550,0000 \$ 1,550,0000 \$ 1,550,0000 \$ 1,550,0000 \$	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         500,000           \$         500,000           \$         500,000           \$         362,070           \$         26,820           \$         335,250           \$         1,703,070           \$         36,839,000           \$         8,747,373           \$         45,586,373           \$         11,235,000           \$         1,500,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 43,232,000 \$ 9,696,073 \$ 56,42,000 \$ 1,000,000 \$ 1,000,000	2     \$ 409,000       2     \$ -0       3     409,000       2     \$ -       3     409,000       3     \$ -       0     \$ -       1     \$ -       2     \$ -       3     \$ -       3     \$ -       4     \$ -       5     \$ -       6     \$ -       7     \$ -       8     \$ -       9     \$ -       9     \$ -       9     \$ -       10     \$ -       10     \$ -       10     \$ -       10     \$ -       10     \$ -       10     \$ -       10     \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 460,250 \$ 2,338,070 \$ 47,762,000 \$ 9,868,305 \$ 5,642,000 \$ 5,642,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         4,97,070           \$         460,250           \$         4,60,250           \$         4,7,725,000           \$         9,901,773           \$         57,626,773           \$         5,642,000           \$         1,000,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,41,000           \$         4,97,070           \$         460,250           \$         460,250           \$         2,338,070           \$         48,788,000           \$         9,919,541           \$         5,642,000           \$         1,000,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 1,042,000 \$ 208,188,000 \$ 43,936,000 \$ 252,124,000 \$ 34,803,000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,500,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 2,176,250         \$ 11,055,350         \$ 224,346,000         \$ 48,133,066         \$ 272,479,066	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total MT budget Total Program Budget without Overheads Total Program Budget with Program-level Overhead Portfolio-level Overhead - Revised Research Evaluation	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ 201,000 \$ 1,042,000 \$ 1,042,000 \$ 44,573,000 \$ 41,573,000 \$ 11,735,000 \$ 11,500,000 \$ 1,500,000 \$ 1,300,000	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         500,000           \$         500,000           \$         1,341,000           \$         362,070           \$         26,820           \$         335,250           \$         1,703,070           \$         36,839,000           \$         8,747,373           \$         45,586,373           \$         1,235,000           \$         1,300,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 9,696,073 \$ 52,928,073 \$ 5,642,000 \$ 1,000,000 \$ 1,000,000 \$ 1,300,000	2     \$ 409,000       2     \$ 409,000       3     \$ 409,000       5     783,000       5     -       5     -       5     -       5     -       2     \$ -       2     \$ -       2     \$ -       2     \$ -       2     \$ -       3     \$ -       44,283,000     \$ 5,642,000       3     \$ 5,642,000       0     \$ 1,000,000       5     1,300,000	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         4,97,070           \$         36,820           \$         4,60,250           \$         46,0250           \$         46,8305           \$         7,762,000           \$         9,868,305           \$         5,642,000           \$         1,300,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         497,070           \$         36,820           \$         460,250           \$         460,250           \$         467,070           \$         9,901,773           \$         57,626,773           \$         5,642,000           \$         1,300,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         4,97,070           \$         36,820           \$         460,250           \$         46,0250           \$         48,788,000           \$         9,919,541           \$         58,707,541           \$         5,642,000           \$         1,300,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 1,042,000 \$ 208,188,000 \$ 43,936,000 \$ 252,124,000 \$ 34,803,000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,500,000         \$ 4,500,000         \$ 2,350,350         \$ 2,350,350         \$ 2,176,250         \$ 11,055,350         \$ 224,346,000         \$ 48,133,066         \$ 272,479,066	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total Program Budget without Overheads Total Program Budget with Program-level Overhead Portfolio-level Overhead - Revised Research Evaluation Administration	\$ 409,000         \$ -         \$ 409,000         \$ -         \$ 809,000         \$ 809,000         \$ 809,000         \$ 201,000         \$ 201,000         \$ -         \$ 201,000         \$ 1,042,000         \$ 1,023,000         \$ 1,550,000         \$ 1,500,000         \$ 1,300,000         \$ 1,300,000         \$ 1,300,000	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         500,000           \$         1,341,000           \$         362,070           \$         26,820           \$         335,250           \$         1,703,070           \$         36,839,000           \$         8,747,373           \$         45,586,373           \$         1,235,000           \$         1,300,000           \$         2,935,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 43,232,000 \$ 43,232,000 \$ 43,232,000 \$ 5,642,000 \$ 1,300,000 \$ 1,300,000 \$ 2,842,000	2       \$ 409,000         3       -         3       \$ 409,000         5       -         5       \$ 409,000         5       783,000         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       52,787,000         5       5,642,000         5       1,300,000         5       2,842,000	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,841,000           \$         460,250           \$         460,250           \$         460,250           \$         9,868,305           \$         57,630,305           \$         56,642,000           \$         1,000,000           \$         1,000,000           \$         3,00,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,841,000           \$         497,070           \$         36,820           \$         460,250           \$         9,901,773           \$         57,626,773           \$         5,642,000           \$         1,300,000           \$         1,300,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         460,250           \$         2,338,070           \$         9,919,541           \$         56,42,000           \$         1,000,000           \$         1,000,000           \$         1,300,000           \$         1,300,000           \$         1,300,000           \$         1,342,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 1,042,000 \$ 1,042,000 \$ 208,188,000 \$ 43,936,000 \$ 252,124,000 \$ 34,803,000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 20,000,000         \$ 20,000,000         \$ 20,000,000         \$ 20,000,000         \$ 2,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 2,350,350         \$ 174,100         \$ 2,176,250         \$ 11,055,350         \$ 224,346,000         \$ 224,346,000         \$ 272,479,066         \$ 33,803,000	5.4.1 5.4.3
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total Program Budget without Overheads Total Program Budget with Program-level Overhead Protal Program Budget with Program-level Overhead Portfolio-level Overhead - Revised Research Evaluation Pilots - Revised with Direct Install Pilot Removed	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 809,000 \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ 1,042,000 \$ 1,500,000 \$ 1,500,000 \$ 1,300,000 \$ 1,000,000 \$ 1,000,0000 \$ 1,000,0000 \$ 1,000,000	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         4,000,000           \$         500,000           \$         1,341,000           \$         362,070           \$         26,820           \$         335,250           \$         1,703,070           \$         8,6,839,000           \$         8,747,373           \$         11,235,000           \$         1,500,000           \$         1,300,000           \$         2,935,000           \$         500,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 43,232,000 \$ 5,642,000 \$ 1,300,000 \$ 1,300,000 \$ 2,842,000 \$ 500,000	2       \$ 409,000         3       -         3       409,000         5       -         5       783,000         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       5.0000         5       5.642,000         5       1,300,000         5       2,842,000         5       50,000	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 460,250 \$ 460,250 \$ 460,250 \$ 460,250 \$ 460,250 \$ 460,250 \$ 5,642,000 \$ 1,000,000 \$ 5,642,000 \$ 1,000,000 \$ 5,642,000 \$ 1,000,000 \$ 5,642,000 \$ 5,642,000 \$ 5,00,000 \$ 2,842,000 \$ 2,842,000 \$ 5,00,000 \$ 2,842,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         497,070           \$         460,250           \$         460,250           \$         9,901,773           \$         5,642,000           \$         1,000,000           \$         1,300,000           \$         2,842,000           \$         500,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         497,070           \$         460,250           \$         48,788,000           \$         9,919,541           \$         56,42,000           \$         1,000,000           \$         1,300,000           \$         2,842,000           \$         5,60,000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ - \$ 841,000 \$ - \$ 201,000 \$ 201,000 \$ - \$ 201,000 \$ 1,042,000 \$ 1,042,000 \$ 1,042,000 \$ 252,124,000 \$ 34,803,000 \$ 3,500,000 \$ 3,500,000	\$ 4,250,000         \$ 315,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,500,000         \$ 4,500,000         \$ 4,500,000         \$ 4,500,000         \$ 4,500,000         \$ 2,350,350         \$ 176,250         \$ 11,055,350         \$ 224,346,000         \$ 48,133,066         \$ 272,479,066         \$ 33,803,000         \$ 2,500,000	5.4.1
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total Program Budget without Overheads Total Program Budget without Overheads Total Program Budget with Program-level Overhead Protfolio-level Overhead - Revised Research Evaluation Administration Pilots - Revised Mith Direct Install Pilot Removed DSM Tracking and Reporting System Upgrades	\$ 409,000 \$ - \$ 409,000 \$ 809,000 \$ 809,000 \$ 841,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 201,000 \$ - \$ 34,550,000 \$ 1,042,000 \$ 1,300,000 \$ 1,300,000 \$ 1,000,000 \$ 1,000,000 \$ 1,000,000 \$ 5,000,000 \$ 5,000,0000 \$ 5,000,0000 \$ 5,000,00000	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         500,000           \$         500,000           \$         362,070           \$         26,820           \$         335,250           \$         1,703,070           \$         36,839,000           \$         45,586,373           \$         1,500,000           \$         1,500,000           \$         1,300,000           \$         2,935,000           \$         2,935,000           \$         500,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 40,250 \$ 52,928,073 \$ 5,642,000 \$ 1,000,000 \$ 1,000,000 \$ 5,2928,070 \$ 5,2928,073 \$ 5,642,000 \$ 1,000,000 \$ 5,000 \$ 5,000 \$ 5,000 \$ 5,000 \$ 5,000 \$ 5,000 \$ 5,0000 \$ 5,000 \$ 5,000 \$ 5,0000 \$ 5,00000 \$ 5,0000 \$ 5,00000 \$ 5,0000 \$ 5,00000 \$ 5,000000 \$ 5,00000 \$ 5,00000 \$ 5,00000 \$ 5,00000 \$ 5,000000 \$ 5,000000 \$ 5,000000 \$ 5,000000 \$ 5,000000 \$ 5,000000 \$ 5,000000 \$ 5,000000 \$ 5,0000000 \$ 5,000000 \$ 5,0000000 \$ 5,000000 \$ 5,000000 \$ 5,0000000 \$ 5,000000 \$ 5,0000000 \$ 5,000000000000000000000000000000000000	2       \$ 409,000         3       -         3       409,000         5       -         5       783,000         5       783,000         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       5.000         5       5.0000         5       5.00000         5       1,300,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         4,97,070           \$         36,820           \$         460,250           \$         460,250           \$         2,338,070           \$         9,868,305           \$         5,763,0305           \$         5,642,000           \$         1,000,000           \$         2,842,000           \$         5,00,000	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         497,070           \$         460,250           \$         460,250           \$         460,250           \$         57,626,773           \$         56,642,000           \$         1,300,000           \$         2,842,000           \$         500,000	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         497,070           \$         36,820           \$         460,250           \$         2,338,070           \$         48,788,000           \$         58,707,541           \$         56,42,000           \$         1,000,000           \$         2,642,000           \$         2,642,000           \$         50,0000	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 2,01,000 \$ 2,000 \$ 3,480,000 \$ 3,480,000 \$ 3,500,000 \$ 3,500,000 \$ 2,01,000 \$ 3,500,000 \$ 3,500,0000 \$ 3,500,0000 \$ 3,500,0000 \$ 3,500,0000 \$ 3,500,00000 \$ 3,500,000000000000000000000000000000000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 2,350,350         \$ 174,100         \$ 2,176,250         \$ 11,055,350         \$ 244,346,000         \$ 48,133,066         \$ 272,479,066         \$ 3,803,000         \$ 2,500,000         \$ 2,500,000	5.4.1 5.4.3
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total Program Budget without Overheads Total Program Budget with Program-level Overhead Portfolio-level Overhead - Revised Research Evaluation Administration Pilots - Revised mith Direct Install Pilot Removed DSM Tracking and Reporting System Upgrades Total DSM Budget Pre-Inflation	\$ 409,000         \$ -         \$ 409,000         \$ -         \$ 809,000         \$ 809,000         \$ 809,000         \$ 201,000         \$ 201,000         \$ 201,000         \$ 1,042,000         \$ 1,042,000         \$ 1,042,000         \$ 1,500,000         \$ 1,500,000         \$ 1,500,000         \$ 1,500,000         \$ 1,500,000         \$ 56,000,000	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         500,000           \$         500,000           \$         362,070           \$         26,820           \$         335,250           \$         1,703,070           \$         36,839,000           \$         45,586,373           \$         1,500,000           \$         1,500,000           \$         1,300,000           \$         2,935,000           \$         2,935,000           \$         500,000					\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,841,000 \$ 1,841,000 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 9,696,073 \$ 52,928,073 \$ 5,642,000 \$ 1,000,000 \$ 1,300,000 \$ 1,300,000 \$ 5,642,000 \$ 5,642,0000 \$ 5,642,0000 \$ 5,642,0000 \$ 5,642,0000 \$ 5,642,000	2       \$ 409,000         3       -         3       409,000         5       -         5       783,000         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       5.0000         5       5.642,000         5       1,300,000         5       2,842,000         5       50,000	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,41,000           \$         1,841,000           \$         1,841,000           \$         1,840,000           \$         1,840,000           \$         1,840,000           \$         2,338,070           \$         9,868,305           \$         5,642,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         5,00,000           \$         -           \$         -           \$         -	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         1,841,000           \$         1,841,000           \$         1,840,000           \$         460,250           \$         2,338,070           \$         9,901,773           \$         57,626,773           \$         5,642,000           \$         1,300,000           \$         1,300,000           \$         2,842,000           \$         -           \$         -           \$         63,268,773	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,000,000           \$         1,41,000           \$         1,841,000           \$         497,070           \$         36,820           \$         4,97,070           \$         36,820           \$         2,338,070           \$         48,788,000           \$         9,919,541           \$         5,642,000           \$         1,000,000           \$         1,000,000           \$         1,300,000           \$         2,842,000           \$         -           \$         64,349,541	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 2,01,000 \$ 2,000 \$ 3,480,000 \$ 3,480,000 \$ 3,500,000 \$ 3,500,000 \$ 2,01,000 \$ 3,500,000 \$ 3,500,0000 \$ 3,500,0000 \$ 3,500,0000 \$ 3,500,0000 \$ 3,500,00000 \$ 3,500,000000000000000000000000000000000	\$ 4,250,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 20,000,000         \$ 2,350,350         \$ 174,100         \$ 2,350,350         \$ 11,055,350         \$ 224,346,000         \$ 224,346,000         \$ 33,803,000         \$ 33,803,000         \$ 2,500,000         \$ 2,500,000         \$ 3,803,000	5.4.1 5.4.3 5.7
Large Volume - Revised Large Volume Overhead - Revised Evaluation - Revised Administrative costs - Revised Large Volume Total Market Transformation Optimum Home - Revised Commercial Savings By Design - New Program Budget Market Transformation Overhead - Revised Evaluation - Revised Administrative costs - Revised Total Program Budget without Overheads Total Program Budget with Program-level Overhead Portfolio-level Overhead - Revised Research Evaluation Administration Pilots - Revised mith Direct Install Pilot Removed DSM Tracking and Reporting System Upgrades Total DSM Budget Pre-Inflation Cumulative inflation @ 1.68% - Rejected	\$ 409,000         \$ -         \$ 409,000         \$ -         \$ 809,000         \$ 809,000         \$ 809,000         \$ 201,000         \$ 201,000         \$ 201,000         \$ 1,042,000         \$ 1,042,000         \$ 1,042,000         \$ 1,500,000         \$ 1,500,000         \$ 1,500,000         \$ 1,500,000         \$ 1,500,000         \$ 56,000,000	\$         850,000           \$         63,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         500,000           \$         500,000           \$         1,341,000           \$         362,070           \$         26,820           \$         335,250           \$         1,703,070           \$         36,839,000           \$         8,747,373           \$         45,586,373           \$         1,235,000           \$         1,500,000           \$         2,935,000           \$         5,000,000           \$         5,000,000           \$         5,000,000           \$         5,000,000           \$         5,000,000           \$         5,000,000           \$         5,000,000		Section 5.29			\$ 409,000 \$ - \$ 409,000 \$ 758,000 \$ 758,000 \$ 758,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 850,000 \$ 63,000 \$ 787,000 \$ 4,000,000 \$ 1,000,000 \$ 1,000,000 \$ 1,000,000 \$ 1,841,000 \$ 497,070 \$ 36,820 \$ 460,250 \$ 2,338,070 \$ 43,232,000 \$ 43,232,000 \$ 43,232,000 \$ 5,642,000 \$ 5,642,000 \$ 1,000,000 \$ 1,300,000 \$ 1,300,000 \$ 5,642,000 \$ 5,6570,073 \$ 58,570,073 \$ -	2       \$ 409,000         2       \$ -         3       \$ 409,000         5       -         5       \$ 409,000         5       783,000         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       -         5       5.642,000         5       5.642,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000         5       5.00,000	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         1,841,000           \$         460,250           \$         460,250           \$         9,868,305           \$         57,630,305           \$         5,642,000           \$         1,000,000           \$         2,842,000           \$         500,000           \$         63,272,335           \$         -	\$ 409,000 \$ - \$ 409,000 \$ 807,000 \$ 807,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,841,000           \$         497,070           \$         36,820           \$         460,250           \$         460,250           \$         9,901,773           \$         57,626,773           \$         5,642,000           \$         1,000,000           \$         2,842,000           \$         500,000           \$         63,268,773           \$         63,268,773	\$ 409,000 \$ - \$ 409,000 \$ 831,000 \$ 831,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$         850,000           \$         63,000           \$         787,000           \$         4,000,000           \$         1,000,000           \$         1,000,000           \$         1,41,000           \$         4,907,070           \$         36,820           \$         460,250           \$         460,250           \$         36,820           \$         9,919,541           \$         58,707,541           \$         56,42,000           \$         1,000,000           \$         1,300,000           \$         2,842,000           \$         -           \$         64,349,541           \$         -	\$ 2,045,000 \$ - \$ 2,045,000 \$ 3,985,000 \$ 3,985,000 \$ 3,985,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 201,000 \$ 1,042,000 \$ 208,188,000 \$ 252,124,000 \$ 34,803,000 \$ 3,500,000 \$ 3,500,000 \$ - \$ 286,927,000	\$ 4,250,000         \$ 315,000         \$ 315,000         \$ 3,935,000         \$ 20,000,000         \$ 20,000,000         \$ 20,000,000         \$ 20,000,000         \$ 20,000,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,205,000         \$ 4,500,000         \$ 2,350,350         \$ 174,100         \$ 2,176,250         \$ 11,055,350         \$ 224,346,000         \$ 272,479,066         \$ 33,803,000         \$ 2,500,000         \$ 2,500,000         \$ 306,282,066         \$ 306,282,060	5.4.1 5.4.3 5.7

## SCHEDULE B

**DECISION AND ORDER** 

## **OEB-APPROVED SCORECARD WEIGHTING**

**ENBRIDGE GAS DISTRIBUTION INC.** 

(EB-2015-0049)

**UNION GAS LIMITED** 

(EB-2015-0029)

**JANUARY 20, 2016** 

		Enbridge Metric Weight	ings and Targets			
Resource Acquisition Programs	Proposed Metrics	2016 Utility-Proposed Metric Weightings	2016 OEB-Approved Metric Weightings	2016 Utility- Proposed Shareholder Incentive Weighting	2016 OEB- Approved Shareholder Incentive Weighting	OEB-Approved 2016 Target
Home Energy Conservation (HEC) Residential Adaptive Thermostats Commercial & Industrial Custom	Large Volume Customers Cumulative Natural Gas Savings	40%	40%			664.6
Commercial & Industrial Prescriptive Commercial & Industrial Direct Install Run-it-Right Comprehensive Energy Management (CEM) Small Commercial New Construction	Small Volume Customers Cumulative Natural Gas Savings	40%	40%	59%	65%	319.2
Home Energy Conservation (HEC)	Residential Deep Savings Participants	20%	20%			8259
Low-Income Programs						-
Home Winterproofing	Single Family Cumulative Natural Gas Savings	45%	45%			31.8
Low-Income Multi-Residential	Multi-Residential Cumulative Natural Gas Savings	45%	45%	18%	23%	64.9
Low-Income New Construction	New Construction Program Participants	10%	10%			6
Market Transformation & Energy Management Programs						
My Home Health Record (Opower)*	Cumulative Natural Gas Savings (m3)	5%	N/A			N/A
School Energy Competition	Schools	5%	10%			55
Run-it-Right	Participants	20%	20%			83
Comprehensive Energy Management (CEM)	Participants	20%	20%			7
Residential Savings by Design	Builders	10%	10%			33
	Homes Built	15%	15%	23%	12%	2751
Commercial Savings by Design	New Developments	15%	25%	ļ		33
New Construction Commissioning*	Enrollments	5%	N/A			N/A
Home Rating*	Ratings	5%	N/A			N/A
Energy Compass*	No metric proposed	0%	0%			0
Small Commercial & Industrial Behavioural*	No metric proposed	0%	0%			0
Energy Literacy * My Home Health Record, New Const	No metric proposed	0%	0%			0

\* My Home Health Record, New Construction Commissioning, Home Rating, Energy Compass, Small Commercial & Industrial Behavioural were not approved

		Union Metric Weightir	has and Targets		
Resource Acquisition Programs	Proposed Metrics	Utility-Proposed Metric Weightings		2016 Utility- Proposed Shareholder Incentive Weighting	2016 OEB- Approved Metric Weightings
Home Reno Rebate Energy Savings Kits* Behavioural* Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct Install**	Cumulative Natural Gas Savings	75%	75%	70%	61%
Home Reno Rebate	Home Reno Rebate Participants	25%	25%		
Low-Income Programs					
Home Weatherization Furnace End-of-Life Aboriginal	Cumulative Natural Gas Savings	60%	60%		
Multi-family	Social and Assisted Multi- Family Cumulative Natural Gas Savings	35%	35%	26%	25%
	Market Rate Multi-Family cumulative savings	5%	5%		
Large Volume Programs					
Large Volume Program	No metric proposed	(no scorecard)	100%	0%	9%
Market Transformation Programs					
Optimum Home	Homes Built	100%	50%		
Commercial New Construction	New Developments Enrolled	N/A	50%	2%	4%
Performance-Based Programs					
RunSmart	Participants	50%	50%		
	Savings (%)***	0%	0%	1%	1%
Strategic Energy Management	Participants	50%	50%	170	170
	Savings (%)***	0%	0%		
Notes:					

\* Energy Savings Kit and Behaviour Programs were not approved

\*\* Union did not assign a CCM-based target for the Direct Install program because it was proposed as a pilot. OEB has approved a target for this program, as discussed in section 5.2.5

\*\*\* Performance-based Scorecard has the following weightings in the following years, all of which are approved:

2017: RunSmart Participants (20%), RunSmart Savings (60%), SEM Participants (20%), SEM Savings (0%)

2018: RunSmart Participants (10%), RunSmart Savings (40%), SEM Participants (10%), SEM Savings (40%)

2019-2020: RunSmart Participants (10%), RunSmart Savings (40%), SEM Participants (0%), SEM Savings (50%)



SCHEDULE C

**DECISION AND ORDER** 

**OEB-APPROVED SCORECARDS** 

**ENBRIDGE GAS DISTRIBUTION INC.** 

(EB-2015-0049)

UNION GAS LIMITED (EB-2015-0029)

**JANUARY 20, 2016** 

	Enbridge 2016 Resource Acquisition Scorecard						
			Metric Target		Weight		
Programs	Metrics	Lower Band	Target	Upper Band			
	Large Volume Customers Cumulative Natural Gas Savings (m3)	498,464,605	664,619,473	996,929,209	40%		
	Small Volume Customers Cumulative Natural Gas Savings (m3)	239,378,409	319,171,212	478,756,818	40%		
Home Energy (Conservation (HE(C))	Residential Deep Savings Participants (Homes)	6,194	8,259	12,388	20%		

	Enbridge 2016 Low Income Scorecard							
			Metric Target					
Programs	Metrics	Lower Band	Target	Upper Band	Weigh			
Home Winterproofing	Cumulative Natural Gas Savings (m3)	23,842,500	31,790,000	47,685,000	40%			
Low-Income Multi- Residential	Cumulative Natural Gas Savings (m3)	48,675,000	64,900,000	97,350,000	40%			
Low-Income New Construction	Number of Project Applications	4	6	8	20%			

		Enbridge 2017 Re	source Acquisition Scorecard				
			Metric Target				
Programs	Metrics	Lower Band	Target	Upper Band	Weight		
Residential Adaptive Thermostats	Large Volume Customers Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 Large Volume Customers Resource Acquisition actual spend without overheads x 2017 Large Volume Customers Resource Acquisition budget without overheads x 1.02	150% of Target	40%		
Residential Adaptive Thermostats Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct Install Run-it-Right Comprehensive Energy	Small Volume Customers Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 Small Volume Customers Resource Acquisition actual spend without overheads x 2017 Small Volume Customers Resource Acquisition budget without overheads x 1.02	150% of Target	40%		
Home Energy (Conservation (HE(C))	Residential Deep Savings Participants (Homes)	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	20%		

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

Enbridge 2018 Resource Acquisition Scorecard								
Programs	Metrics		Metric Target		Mainht			
	Metrics	Lower Band	Target	Upper Band	Weight			
Home Energy Conservation (HEC) Residential Adaptive Thermostats Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct	Large Volume Customers Cumulative Natural Gas Savings (m3)	75% of Target	2017 metric achievement (LRAM natural gas savings) / 2017 Large Volume Customers Resource Acquisition actual spend without overheads x 2018 Large Volume Customers Resource Acquisition budget without overheads x 1.02	150% of Target	40%			
Install Run-it-Right Comprehensive Energy Management (CEM) Small Commercial New Construction	Small Volume Customers Cumulative Natural Gas Savings (m3)	75% of Target	2017 metric achievement (LRAM natural gas savings) / 2017 Small Volume Customers Resource Acquisition actual spend without overheads x 2018 Small Volume Customers Resource Acquisition budget without overheads x 1.02	150% of Target	40%			
Home Energy Conservation (HEC)	Residential Deep Savings Participants (Homes)	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	20%			

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

Enbridge 2017 Low Income Scorecard								
			Metric Target		Weight			
Programs	Metrics	Lower Band	Target					
Home Winterproofing	Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	40%			
Low-Income Multi- Residential	Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	40%			
Low-Income New Construction	Number of Project Applications	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	20%			

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

			Enbridge 2018 Low Income Scorecard		
_	Programs Metrics Lower Band		Metric Target		
Programs			Target	Upper Band	Weight
	Cumulative Natural Gas Savings (m3)	75% of Target	2017 metric achievement (LRAM natural gas savings) / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	40%
Multi-	Cumulative Natural Gas Savings (m3)	75% of Target	2017 metric achievement (LRAM natural gas savings) / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	40%
	Number of Project Applications	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	20%

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

	Enbridge 2016 Market Transformation & Energy Management Scorecard								
			Metric Target						
Programs	Metrics	Lower Band	Target	Upper Band	Weight				
School Energy Competition	Schools	41	55	83	10%				
Run-it-Right	Participants	62	83	124	20%				
Comprehensive Energy Management (CEM)	Participants	5	7	10	20%				
Desidential Covings by Design	Builders	25	33	50	10%				
Residential Savings by Design	Homes Built	2,063	2,751	4,127	15%				
Commercial Savings by Design	New Developments	25	33	50	25%				

	Enbridge 2017 Mar	ket Trans	formation & Energy Management Scorecard		
			Metric Target		
Programs	Metrics	Lower Band	Target	Upper Band	Weight
School Energy Competition	Schools	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	10%
Run-it-Right	Participants	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	20%
Comprehensive Energy Management (CEM)	Participants	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	20%
Desidential Cavin na hu Desian	Builders	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	10%
Residential Savings by Design	Homes Built	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	15%
Commercial Savings by Design	New Developments	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	25%

	Enbridge 2018 Mar	ket Trans	formation & Energy Management Scorecard		
Decements	Motrico		Metric Target		M/a is ht
Programs	Metrics	Lower Band	Target	Upper Band	Weight
School Energy Competition	Schools	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	10%
Run-it-Right	Participants	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	20%
Comprehensive Energy Management (CEM)	Participants	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	20%
Desidential Souings by Design	Builders	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	10%
Residential Savings by Design	Homes Built	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	15%
Commercial Savings by Design	New Developments	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	25%

Union Gas 2016 Resource Acquisition Scorecard								
		Metric Targets						
Programs	Metrics	Lower Band	Target	Upper Band	Weight			
Home Reno Rebate Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct Install	Cumulative Natural Gas Savings (m3)	910,578,270	1,214,104,360	1,821,156,541	75%			
Home Reno Rebate	Home Reno Rebate Participants (Homes)	2,475	3,300	4,950	25%			

Union Gas 2017 Resource Acquisition Scorecard								
			Metric Targets	•				
Programs	Metrics	Lower Band	Target	Upper Band	Weight			
Home Reno Rebate Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct Install	Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 Resource Acquisition actual spend without overheads x 2017 Resource Acquisition budget without overheads x 1.02	150% of Target	75%			
Home Reno Rebate	Home Reno Rebate Participants (Homes)	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	25%			

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

	Union G	as 2018 Resou	rce Acquisition Scorecard			
			Metric Targets	-		
Programs	Metrics	Lower Band	Target	Upper Band	Weight	
Home Reno Rebate Commercial & Industrial Custom Commercial & Industrial Prescriptive Commercial & Industrial Direct Install	Cumulative Natural Gas Savings (m3)	1/6% of Larget	2017 metric achievement (LRAM natural gas savings) / 2017 Resource Acquisition actual spend without overheads x 2018 Resource Acquisition budget without overheads x 1.02	150% of Target	75%	
Home Reno Rebate	Home Reno Rebate Participants (Homes)		2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	25%	

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

		Union Ga	s 2016 Low Income Scorecard Metric Target		
Programs	Metrics	Lower Band	Target	Upper Band	Weight
Home Weatherization Furnace End-of-Life Aboriginal	Cumulative Natural Gas Savings (m3)	28,339,761	37,786,348	56,679,521	60%
	Social and Assisted Multi-Family Cumulative Natural Gas Savings (m3)	12,162,016	16,216,022	24,324,033	35%
Multi-family	Market Rate Multi- Family Cumulative Natural Gas Savings (m3)	1,979,863	2,639,817	3,959,726	5%

		Union Ga	s 2017 Low Income Scorecard		
Programs	Metrics	Lower Band	Metric Target Target	Upper Band	Weight
Home Weatherization Furnace End-of-Life Aboriginal	Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	60%
	Social and Assisted Multi-Family Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	35%
Multi-family	Market Rate Multi- Family Cumulative Natural Gas Savings (m3)	75% of Target	2016 metric achievement (LRAM natural gas savings) / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.02	150% of Target	5%

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

Union Gas 2018 Low Income Scorecard Metric Target						
Programs	Metrics	Lower Band	Target	Upper Band	Weight	
Home Weatherization Furnace End-of-Life Aboriginal	Cumulative Natural Gas Savings (m3)	75% of Target	2017 metric achievement (LRAM natural gas savings) / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	60%	
	Social and Assisted Multi-Family Cumulative Natural Gas Savings (m3)	75% of Target	2017 metric achievement (LRAM natural gas savings) / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	35%	
Multi-family	Market Rate Multi- Family Cumulative 75% of Natural Gas Savings Target (m3)		2017 metric achievement (LRAM natural gas savings) / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.02	150% of Target	5%	

Note: Metric achievement is calculated using verified program savings used for LRAMVA purposes

	Unio	on Gas 201	6 Market Transformation Scorecard		
			Metric Target		
Programs	Metrics	Lower Band	Target	Upper Band	Weight
Optimum Home	Homes Built (>20% above OBC 2012) by Participating Builders	75% of Target	2015 Actuals + 20%	150% of Target	50%
Commercial New Construction	New Developments Enrolled by Participating Builders	6	8	12	50%

	U	nion Gas 2	2016 Performance-Based Scorecard		
			Metric Target		
Programs	Metrics	Lower Band	Target	Upper Band	Weight
RunSmart	Participants	21	28	41	50%
Strategic Energy Management (SEM)	Participants	2	3	5	50%

	Union Gas 2017 Market Transformation Scorecard						
			Metric Target				
Programs	Metrics	Lower Band	Target	Upper Band	Weight		
Optimum Home	Homes Built (>20% above OBC 2012) by Participating Builders	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	50%		
Commercial New Construction	New Developments Enrolled by Participating Builders	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	50%		

Union Gas 2017 Performance-Based Scorecard					
			Metric Target		
Programs	Metrics	Lower	Target	Upper	Weight
		Band	-	Band	
RunSmart	Participants	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	20%
	Savings (%)	8%	10%	15%	60%
Strategic Energy Management (SEM)	Participants	75% of Target	2016 metric achievement / 2016 actual program spend without overheads x 2017 program budget without overheads x 1.1	150% of Target	20%

Union Gas 2018 Performance-Based Scorecard					
			Metric Target		
Programs	Metrics	Lower Band	Target	Upper Band	Weight
RunSmart	Participants	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	10%
	Savings (%)	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	40%
Strategic Energy Management (SEM)	Participants	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	10%
	Savings (%)	4%	5%	8%	40%

Union Gas 2018 Market Transformation Scorecard					
			Metric Target		
Programs	Metrics	Lower Band	Target	Upper Band	Weight
Optimum Home	Homes Built (>20% above OBC 2012) by Participating Builders		2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	50%
Commercial New Construction	New Developments Enrolled by Participating Builders	75% of Target	2017 metric achievement / 2017 actual program spend without overheads x 2018 program budget without overheads x 1.1	150% of Target	50%

## SCHEDULE D

**DECISION AND ORDER** 

MID-TERM REVIEW REQUIREMENTS

**ENBRIDGE GAS DISTRIBUTION INC.** 

(EB-2015-0049)

UNION GAS LIMITED (EB-2015-0029)

**JANUARY 20, 2016** 

MID-TERM REQUIREMENT	Enbridge	Union	Section of Decision
Enbridge to explore an integrated program with electricity utilities related to adaptive thermostats	Yes		5.2.2
Union to file results of adaptive thermostat pilot program		Yes	5.2.3
Union to explore different conservation measures and technologies for a mass-market residential program		Yes	5.2.3
Gas utilities to provide evidence showing how it has lowered the free ridership rates of its custom programs	Yes	Yes	5.2.6
Enbridge to provide the evaluation results of the Small Commercial New Construction pilot program	Yes		5.2.7
Evaluation of the Energy Leaders Pilot Program results	Yes		5.2.8
Gas utilities to demonstrate that all low-income programs have a TRC-Plus results of at least 0.7	Yes	Yes	5.3
Gas utilities to provide summary of market needs and demonstration of how Market Transformation programs are prioritized	Yes	Yes	5.4
Gas utilities to consider the appropriateness of categorizing the Residential New Construction programs as Resource Acquisition programs	Yes	Yes	5.4.1
Gas utilities to provide evidence related to an integrated Energy Literacy program	Yes	Yes	5.4.9
Gas utilities to move RunSmart and Run-it-Right programs to Resource Acquisition scorecard	Yes	Yes	5.4.10
Gas utilities to move Comprehensive Energy Management and Strategic Energy Management programs to Resource Acquisition scorecard	Yes	Yes	5.4.11
Gas utilities to develop and expand access to bill for financing purposes related to energy efficiency investments	Yes	Yes	7
Gas utilities to provide evidence related to program overhead and portfolio overhead (or administration) costs	Yes	Yes	8.3
Gas utilities to provide evidence related to additional outcome-based performance scorecard metrics	Yes	Yes	9.2
Gas utilities to provide suggestions on appropriate changes to the target adjustment formula	Yes	Yes	9.4
Gas utilities to file evidence related to integrated conservation programs develop with the IESO	Yes	Yes	11
Gas utilities to file a transition plan to incorporate DSM into infrastructure planning activities	Yes	Yes	12