Report on the proposed short-term (2010) framework for natural gas low-income DSM

Final report of the Conservation Working Group to the Ontario Energy Board

August 13, 2009

Report on the proposed short-term (2010) framework for natural gas low-income DSM

Final report of the Conservation Working Group to the Ontario Energy Board

IndEco

DISCLAIMER:

Information contained in this report represents the views of the organizations participating in the Conservation Working Group, and does not necessarily represent the views of, and should not be attributed to, the Ontario Energy Board, any individual Board Member or Board staff.

This document was prepared for the Ontario Energy Board by Shona Adamson, Patti Campbell, Judy Simon, and Amy Snook of IndEco Strategic Consulting Inc.

For additional information about this document, please contact:

IndEco Strategic Consulting Inc.
77 Mowat Avenue, Suite 412
Toronto, ON, Canada
M6K 3E3

Tel: 416 532-4333
E-mail: **info@indeco.com**

IndEco report A9522

August 13, 2009

Acknowledgements

IndEco sincerely thanks the Conservation Working Group members for their time, dedication, and diligent efforts to reach consensus on all issues related to the development of this report. Considering the array of priorities and mandates around the table, significant agreement was reached on all topics. The result of these efforts is reflected in a framework that will balance the needs of low-income energy consumers, the business of providing natural gas, and provincial conservation efforts.

Also sincere thanks to Board staff for their technical and logistical support in the planning and delivery of the Working Group meetings.

All of your efforts are very much appreciated.

Contents

1 Introduction

1.1 Background to the OEB consultation

In its generic decision in 2006 on the natural gas framework for Demand Side Management ("DSM"), the Ontario Energy Board (the "Board") established the current framework for natural gas DSM. As part of the settlement agreement in that proceeding which the Board accepted, parties to the settlement agreed that it was appropriate to establish a minimum amount of spending on targeted low-income programs in the residential rate classes of Enbridge Gas Distribution ("Enbridge") and Union Gas ("Union").

In July of 2008, the Board initiated a consultation to examine issues associated with low-income energy consumers in relation to their use of natural gas and electricity. On March 10, 2009, the Board issued a "Report of the Board: Low-Income Energy Assistance Program", which describes the policies and measures that the Board expects electricity and natural gas distributors to put in place in order to assist low-income energy consumers in relation to their use of natural gas and electricity. The Low-Income Energy Assistance Program, or LEAP, is comprised of three components:

- Temporary financial assistance for low-income energy consumers in need (This component is addressed by the emergency Financial Assistance Working Group)
- Access to tailored customer service measures on matters such as billing, bill payment, disconnections, security deposits and arrears management (This component is addressed in another Board proceeding)
- Targeted electricity conservation and demand management ("CDM)"; and natural gas (This component is addressed by the Conservation Working Group as part of this process)

On April 14th, the Board issued a letter extending the existing natural gas DSM framework for one year and requiring Enbridge and Union to file one-year DSM plans for 2010 by May 30, 2009. This was followed by a Board letter on May 13 indicating that the framework for DSM programs for low-income energy consumers will be considered separately from the main DSM portfolio of the natural gas distributors. As such, Union and Enbridge were instructed to remove the parts of their DSM budgets, targets, shareholder incentives and programs related to low-income energy consumers.

1.2 Purpose of the Conservation Working Group

On May 11, 2009, the Board issued a letter announcing the formation of two working groups to complete the work necessary to implement the financial assistance and conservation components of LEAP. The letter indicated that the role of the Conservation Working Group ("CWG") will be to develop both a short-term (2010) and long-term framework for DSM by natural gas distributors as it relates to low-income energy consumers. The role of the emergency Financial Assistance Working Group will be to address emergency financial assistance and to provide the framework for the long-term coordination of the emergency financial assistance program.

The CWG will focus on outstanding issues related to the development of the short-term and long-term frameworks. The long-term framework has been delayed until further information on the CDM framework for the electricity sector is available.

As outlined in the Board's letter of May 11, the outstanding issues for CWG to focus on are:

- Appropriate DSM programs for low-income consumers
- Budgets and targets
- Program screening methods
- Shareholder incentive structures

In the May 11 letter, the Board requested nominations of members to one or more working groups. The Board received sixteen nominations for the Conservation Working Group. The Board reviewed each of the nominations and fifteen parties were selected for each of the working groups and represent relevant constituencies: low-income and other ratepayers, environmental interests, social service providers, natural gas distributors, small and large electricity distributors and various levels of government. The composition was selected to achieve an appropriate balance of the relevant interests, while maintaining the size of each of the working groups at a level that would optimize efficiency.

On June 5, 2009 the Board issued a letter announcing the membership of each of the working groups. The membership of the Conservation Working Group is shown in Table 1 below.

Table 1 LEAP Conservation Working Group membership

Representing	Working Group Member
City of Toronto	Rob Maxwell
Coalition of Large Distributors (CLD)	Sarah Griffiths Savolaine
Cornerstone Hydro Electric Concepts (CHEC)	Gord Eamer
Direct Energy (DE)	Chantelle Bramley
Electricity Distributors Association (EDA)	Brian Smith
Enbridge Gas Distribution (Enbridge)	Patricia Squires & Cheryl Bezanson
Green Communities Canada (GEC)	Clifford Maynes
Green Energy Coalition (GEC)	Kai Millyard[1]
Hydro One Networks (Hydro One)	Jim Hall
Low Income Energy Network (LIEN)	Theresa McClenaghan
Ministry of Energy and Infrastructure (MEI)	Yvonne Di Tullio
Ontario Power Authority (OPA)	Carrie Aloussis
Social Housing Services Corporation (SHSC)	Lindsey Reed[2]
Union Gas (Union)	Tom Cloutier[3] & Tracey Brooks
Vulnerable Energy Consumers Coalition/Energy Probe (VECC)[4]	Roger Higgin[5]

[1] Replaced by David Poch
[2] Replaced by Deb Thompson and Keir Brownstone
[3] Replaced by Chris Appleton
[4] Vulnerable Energy Consumers Coalition (VECC) is currently comprised of, and represents, the Ontario Coalition of Senior Citizens (OCSCO), and the Federation of Metro Tenants Association.
[5] The nomination of Roger Higgin was supported by the Canadian Manufacturers and Exporters (CME).

On June 22nd, the Board retained IndEco Strategic Consulting Inc. ("IndEco") to facilitate the Conservation Working Group[6] and to liaise with the emergency Financial Assistance Working Group to address overlap issues and keep the CWG members abreast of progress on emergency financial assistance matters.

1.3 The development of this report

The Conservation Working Group met in June, July, and August over a period of seven weeks to prepare recommendations to the Board on the short-term framework for low-income DSM by natural gas distributors. The minutes of the meetings are posted on the Board's website. During these meetings CWG members as well as external presenters made presentations to the group addressing various issues. These presentations are also posted on the Board's website.

The CWG met five times: June 25th, July 2nd, July 9th, July 16th and August 6th. At the June 25th meeting, CWG members were introduced to the mandate of the CWG and began discussion of principles for guiding the development of the framework as well as the budgets and targets, incentive mechanism and DSM programs for the short-term framework. At the July 2nd meeting, members asked the natural gas utilities to prepare a first cut at their proposed short-term framework for presentation and discussion at the next CWG meeting. At the meeting of July 9th, work continued on the guiding principles and there was a detailed discussion regarding the natural gas utilities' presentations on the short-term framework. CWG members were asked to provide written feedback on the guiding principles as well as their suggestions for the short-term framework. Nine groups – CHEC, CLD, GCC, GEC, Hydro One, LIEN, OPA, SHSC and VECC - provided written submissions.

Taking into account the discussion at the July 9th meeting and the written feedback, as well as carrying out further work on short-term framework development, each natural gas utility was asked to prepare a written draft report containing their recommendations for the short-term natural gas low-income DSM framework. The natural gas utilities began this effort and concluded that a joint report was more appropriate.

Late in the day on July 15th, Union Gas informed the facilitator that based on the significance and the impacts of the 2010 low-income plan, there had not been enough time to construct a proper framework to move forward and allow for CWG input on budget, targets and incentives, and that the draft document which was prepared jointly by the natural gas utilities should not be distributed or discussed at the July 16th CWG meeting. Further, Union requested a 1-2 week extension on the joint report to provide time to further analyze the impacts of a 2010 low-income plan as it relates to budget, targets and incentives. Union's

[6] IndEco was also retained by the Board to facilitate the emergency Financial Assistance Working Group.

request was supported by Enbridge. CWG members felt that the request for more time was prudent and indicated general support for the extension.

The facilitator consulted with the Board regarding these requests. The Board decided that the facilitator would prepare a draft report for discussion at the July 16th meeting that would be based on the feedback obtained to date from the other members of the CWG. At the meeting of July 16th, the CWG provided extensive feedback on the draft report. Board Staff agreed to provide the natural gas utilities with a 1-2 week extension to provide their report on screening, budget, targets, and incentive mechanism. The facilitator prepared a revised version of the draft report, which addressed the comments received, and circulated the revised draft to all of the CWG members on July 20th, requesting feedback by July 22nd. A revised version of the draft report was submitted to the CWG members on July 24th. The natural gas utilities submitted their proposals on July 28th; these proposals are included in Appendix A. At the August 6th meeting, Union and Enbridge presented their proposals for screening, scorecards, budget, targets, and incentive mechanism. Based on the discussion of these proposals, the CWG reached consensus on many of the main points and principles.

Following this meeting, the CWG members were asked to submit their written comments on the July 24th draft report and on the Enbridge and Union proposals by August 10th. These comments are included in Appendix B. Based on these comments and the July 24th CWG report, a draft of the final report on the proposed short-term framework for low-income natural gas DSM was prepared by the facilitator. This report was distributed to all CWG members for comment on August 12th. The same day comments were provided to the CWG facilitator on this report. These comments are included in Appendix C. Based on the comments received on the draft final report, the final report was finalized and submitted to the Board on August 13th.

1.4 Content of the report

This report is the final report prepared by the CWG facilitator. This report presents the consensus of the CWG regarding the elements of the low-income natural gas DSM framework, as well as the differing views. Consensus in this report is defined as agreement by all fifteen members of the working group. The CWG consensus is described by framework element and is presented in Chapters 2 and 3 under the sub-heading, consensus view. Differing views (at least one member does not share the consensus view) are presented in the same chapters under the sub-heading, non-consensus views.

Appendix A contains the proposed short-term frameworks submitted by the natural gas utilities. Appendix B contains comments from the CWG members on the revised draft short-term framework report. Appendix C contains comments from the CWG members on the draft final report on the proposed short-term (2010) framework for natural gas low-income DSM. All comments presented in the appendix are as they were received by the facilitator.

The report includes discussion at the framework level of the appropriate DSM programs for low-income consumers, budgets and targets, program screening methods and incentive mechanism based on the work of the CWG. Once the Board approves the framework, the natural gas utilities are expected to file detailed low-income DSM plans, including the related smart protocols, for Board approval, consistent with the approved framework.

At the time of writing this report, the Minister of Energy and Infrastructure had not yet provided guidance on the implementation of the *Green Energy and Green Economy Act, 2009* ("Green Energy Act") regarding the role of the electric local distribution companies ("LDCs") in delivering CDM and low-income energy programs, in particular. The CWG discussion was mindful of the Green Energy Act and took into consideration matters of potential integration between gas and electricity services for the low-income energy sector in its work. Discussion of the long-term framework has been deferred until further information on the CDM framework is available.

2 Guiding principles for low-income DSM framework

In the Board's LEAP report, the Board established a set of principles to guide it in developing policies regarding low-income energy consumers. Building on and consistent with these principles, the CWG developed a set of principles to guide the natural gas utilities in the development of low-income DSM programs in 2010 and subsequent years.

Consensus among the CWG members was reached on the majority of the guiding principles. Additional comments submitted on these principles are included as footnotes. For those guiding principles where consensus was not reached, the differing views are described below in Section 2.2.

2.1 The guiding principles

These principles apply to the long-term framework for low-income DSM by natural gas utilities. However, to the extent possible, they should guide the development of the short-term framework as well. The short-term framework for low-income DSM by natural gas utilities should not constrain or conflict with the long-term framework that is developed.

These guiding principles represent a broad approach to low-income natural gas DSM in Ontario and have general applicability to all aspects of low-income energy conservation.

Low-income natural gas DSM should:

1. Be accessible to low-income natural gas consumers[7]

    a) Be accessible province-wide in the long term

    b) Require no upfront cost to the low-income energy consumer and result in an improvement in energy efficiency within the consumer's residence

    c) Address non-financial barriers (e.g. communication, cultural and linguistic)

2. Be delivered in a cost-effective manner[8]

3. Provide a simple, non-duplicative, integrated and coordinated application, screening and intake process for the low-income

[7] 'Consumer' includes persons living in residences and pay their energy costs or with energy costs included in their rent.

[8] The traditional measure of cost-effectiveness for natural gas DSM in Ontario has been the TRC test. While the natural gas utilities agree that the principle of cost-effectiveness for low-income programs is an important one, they emphasize that they do not believe TRC is the appropriate measure at this time. Cost-effectiveness is defined and discussed in Section 3.5.

conservation program that covers all segments of the low-income housing market including, for example, homeowners, owners and occupants of social and assisted housing, and owners of privately owned buildings that have low-income residents, whether or not these residents are responsible for paying their energy bills

a) Use criteria for determining program eligibility[9]

4. Provide integrated, coordinated delivery, wherever possible, with electric LDCs and natural gas utilities[10]; provincial and municipal agencies; social service agencies and agencies concerned with health and safety issues (Consensus was not reached on this guiding principle. See Section 2.2)

    a) Encourage collaboration with partners such as private, public and not-for-profit organizations for program delivery

5. Be a direct install program

    a) Provide a turnkey solution from the perspective of the participant such that the participant deals with one entity for the program which coordinates all elements of delivery

    b) Emphasize deep measures that may include, where applicable, energy efficiency, demand response, fuel-switching, customer based generation and renewables

6. Provide an education and training strategy

    a) Encourage behaviour change of program participants toward a culture of conservation

    b) Help low-income energy consumers help themselves

    c) Help program participants to understand the benefits of participating in the low-income DSM program and conservation, in general

    d) Help channel partners attain necessary skills

---

[9] These criteria are for the low-income energy conservation program and do not apply to the low-income emergency financial assistance program or any other program.

[10] The integrated approach could be expanded to include resource conservation (e.g. water).

7. Provide on-going measurement of results, feedback and accountability for continuous improvement of the program and identification of best practices

    a) Design programs that encourage persistence of energy savings[11]

8. Ensure that incentives for utilities are adequate for success[12]

9. Have a DSM framework that strikes an appropriate balance between having a stable framework and having the flexibility to respond to changing market conditions

    a) Be comprised of multi-year programs

    b) Allow for appropriate capacity building within the gas utilities and in the marketplace

2.2 Guiding principle issues

The CWG did not reach consensus on Principle 4:

4. Provide integrated, coordinated delivery, wherever possible, with electricity LDCs and natural gas utilities[13]; provincial and municipal agencies; social service agencies and agencies concerned with health and safety issues

    a) Encourage collaboration with partners such as private, public and not-for-profit organizations for program delivery

For those CWG members that did not agree with this guiding principle they offered the following rationale:

GCC: "GCC believes a fully integrated province-wide all-fuel program needs to be designed, developed, and delivered—therefore this principle is inadequate insofar as it anticipates after the fact coordination 'wherever possible.' This is a prescription for a degree of collaboration but not true integration."

---

[11] VECC: 7(a) should be moved to become 5(d.)

[12] VECC: "Should include sub-points under Principle 8 (details to be approved by OEB) a) DSMVA, b) LRAMVA protection based on Audited Results, c) SSM based on Scorecard Audited Results"

[13] The integrated approach could be expanded to include resource conservation (e.g. water).

The CWG did not reach consensus on part c) of Principle 5:

> Capture potential lost opportunities for energy savings, including new construction of low-income/affordable housing

For those CWG members that did not agree with this guiding principle they offered the following rationale:

EDA: "I would like to see section 2.1.5. c) [Principle 5c)] moved to 2.7b) [Principle 7 b)] and re-worded. This section is headed as "Be a direct install program". Subsection c) refers to new construction that needs to be influenced by design standards and product selection by housing developers. I don't view this as the same criteria as a direct install program as this section is titled. Recommend that this subsection 2.5.c [Principle 5c)] be moved to section 2.7. as 2.7.b) [Principle 7 b)]. Reworded as b) Capture opportunities for energy efficiency in the products specified and the design for new low-income affordable housing."

3 Short-term framework (2010) for low-income DSM for natural gas distributors

This chapter describes the consensus and non-consensus views of the CWG on the framework elements for the short-term (2010) low-income DSM for natural gas distributors. Under each of the framework elements the consensus view is presented first followed by the non-consensus view or issues. Consensus refers to agreement by all fifteen members of the working group.

For the non-consensus views the issues are described, and differing views of the member(s) are presented. The views of the CWG members are presented as they appear in the written submissions on the draft report (July 24th) and the draft final report (August 12th). These views can also be found in the complete written submissions provided in Appendices A, B and C of this report.

The report includes discussion at the framework level of the program description, target audience, eligibility, program measures, screening, program delivery, education and training, budget and targets, incentive structure, program research for 2010, and additional framework components including Lost Revenue Adjustment Mechanism ("LRAM"), Demand Side Management Variance Account ("DSMVA"), evaluation and reporting. This framework represents significant consensus among the working group members and is expected to be very helpful to the Board in determining the short-term framework (2010) for low-income natural gas DSM.

3.1 Program description

Consensus

The low-income DSM program for 2010 has the following characteristics:

- The program will be a direct install program comprised of measures that are purchased and installed free of charge for the low-income energy consumer. The installed measures should lead to improvements in energy efficiency in the low-income participant's residence and to improvements in quality of life (e.g. comfort, health and safety).
- The program will consist of basic and extended ("deep") measures, with emphasis on providing extended measures where appropriate. All cost-effective measures will be installed in a home, subject to the agreement of the resident.

- Which extended measures to install will be based on a site audit carried out by a qualified energy auditor using a standard smart protocol (details regarding the smart protocol can be found in Section 3.5) that sets priorities for choosing measures based on factors such as the vintage of the existing measure; the measure cost; the energy savings expected over the measure life; and health, comfort and safety considerations, etc. The smart protocol will be developed by the natural gas utilities and filed with the Board for approval as part of their DSM plans.

- A simple, non-duplicative, integrated and coordinated application and intake process.

- An integrated, coordinated delivery, wherever possible, with provincial and municipal agencies, social service agencies and agencies concerned with health and safety issues. Should electric LDCs receive direction to carry out low-income CDM programs in 2010 which can be integrated with this program, then natural gas utilities will be expected to integrate program delivery, where practical.

- Detailed program design should facilitate integration with electricity conservation measures on an ongoing basis as new measures are introduced (e.g. plug loads, appliances such as refrigerators and air-conditioners).

- The program will attempt to leverage the incentives of the federal ecoENERGY program and the Ontario Home Energy Savings Program, and any other relevant programs. This will involve establishing new contractual relationships between NRCan[14] and the natural gas utilities, which may take time to develop.[15]

- The program will have a component that continues each natural gas utility's existing program of low-cost basic measures: Enbridge's *Enhanced TAPS* program and Union's *Helping Homes Conserve* program. These measures will ensure that a number of low-income households receive a basic level of assistance in 2010 and may also aid the natural gas utilities in generating leads for potential participants for the more expensive, deeper measures.

- The program for 2010 is considered an interim, learning year. Quality program design and capacity building for delivery, both

---

[14] Negotiations would also involve the Province of Ontario due to the agreement already in place with NRCan.

[15] In the conference call between Suzanne Deschênes, Deputy Director, Housing Division, Office of Energy Efficiency, NRCan, and members of the CWG at the July 9th meeting, Ms Deschênes advised that it could take up to 4 months to negotiate a contract. This may limit the amount of leveraging possible in 2010.

within the natural gas utilities and in the marketplace, is a priority.

Non-consensus

There were no differing views with the consensus reached.

3.2 Target audience

Consensus

The program for 2010 will focus on a limited number of low-income market segments. With appropriate ramp up over time, the program will expand to encompass all low-income market segments (e.g. multi-residential buildings). All residents of social housing are considered part of the low-income market. The market segments for the 2010 program include:

- Low-income homeowners in private residences
- Low-rise social housing providers and their tenants, including tenants that are either responsible for paying their natural gas bills or who have their natural gas costs included in their rent
- Low-rise private multi-family building owners/building managers where the low-income tenant is responsible for paying the natural gas bill[16]

These market segments were chosen as a starting point for the low-income program as potential program participants in these segments are easiest to reach and the natural gas utilities have some experience in delivering DSM to these segments. Non-social housing low-rise buildings where tenant natural gas costs are included in rent were excluded from the 2010 program to avoid dealing with the complex tenant/landlord rent relationships involved in ensuring that gas savings are passed on to the renters and do not result in higher rents in participating buildings which may force low-income tenants to leave.

High-rise buildings have a different, more complicated set of heating and hot water equipment than low-rise residential buildings. As a result, for ease of implementation in 2010, high-rise buildings were excluded from the 2010 program. These market segments will be pursued following the 2010 program.

[16] The program design must ensure that the benefit accrues to the low-income tenants in the building (or future low-income tenants).

Non-consensus

Issue: Which low-income customers should be targeted first by the low-income program?

In the July 24th draft report it was proposed that “from a marketing standpoint, the gas utilities will use their existing marketing channels to attempt to help the most in-need low-income participants first. From a service standpoint, customers will be served on a first come first served basis.”

The views of the CWG members that disagreed with this approach are presented below.

LIEN: We “recommend a modest change to the targeting principle articulated: ’the program should target the least energy efficient residences within these market segments first.’ While LIEN endorses the principle behind this statement, it worries that determining the ‘least energy efficiency residences’ is an unworkable targeting principle. Determining the relative energy efficiency of various residences may very well depend upon completing the very audit that the targeting principle is based upon. This principle, in other words, assumes the answer. LIEN recommends a two-step targeting principle:

- To begin, the program should target the highest users within these market segments first. Determining who represents the “highest user” amongst various potential households that are otherwise eligible for low-income measures is an objective decision that can be based on data that is easily available and verifiable from the utility.

- Next, should there be a group of households with equal (or reasonably equal) levels of natural gas consumption, the program should target those users with the highest arrears. The use of arrears does not displace the use of consumption as a targeting principle. The consideration of the level of arrears is only within a group of consumers that otherwise stand in equal position for efficiency investments based on their respective usage characteristics.”

GCC: We do not concur with “first come first served. If there is an over supply of applicants, priority customers (hi bill, low income, vulnerable occupants) should jump the queue.”

3.3 Eligibility

Consensus

Consensus was reached on the following eligibility criteria. At issue is whether a low-income cut-offs (LICO) table will also be used as an eligibility criterion (see the non-consensus section below for a discussion of this LICO issue).

The CWG agreed that for 2010 the eligibility criteria used for basic measures (*Enhanced TAPS and Helping Homes Conserve* programs) will continue. For Enbridge this means delivery of the program to neighbourhoods that have a 60% or greater number of low-income households. When a low-income consumer applies through a social service agency or the Winter Warmth program, the applicant must meet the same criteria as listed below for extended measures. The criterion for Union includes delivery of the program to neighbourhoods with a high propensity of low-income customers. Union defines low-income customers at 125% pre-tax LICO.

For the delivery of the extended measures, the CWG agreed that potential participants are to be screened based on meeting the following criteria:

- Primary or secondary name on the gas bill that is a recipient of social benefits (Ontario Works, Ontario Disability Support Program, Ontario Child Care Supplement for Working Families, National Child Benefit Supplement, Guaranteed Income Supplement for Seniors, Allowance for Survivor)

Social service agencies will complete pre-screening for program intake and eligibility and provide referrals to the service providers. This will be the eligibility process except in the case where potential program participants self-identify to the natural gas utilities. As is the current practice of the gas utilities for low-income DSM, if a potential participant self-identifies to the natural gas utility, the utility should be able to refer the applicant to the service provider for screening. An eligible program participant is one who qualifies for an audit. It is the measure screening (discussed in Section 3.7) that determines which measures will be installed in a particular home.

Non-consensus

Issue: Should a LICO table be used as an eligibility screen?

Consensus was reached on the first criterion for eligibility, that being the primary or secondary name on the gas bill that is a recipient of social benefits. At issue is whether a LICO table, as presented below in Table 2 (either the most recent standard LICO table established by Statistics Canada), or a modified LICO table (approved by the OPA and developed by Green Communities Canada) used for the OPA's Low Income Single Family Homes program, as presented below in Table 3, will also be used to determine program eligibility.

The views of the CWG on the use of a LICO table are presented below.

Table 2 Pre-tax Low-Income Cut-Off (LICO) for 2008

	Community size				
	Rural areas	Urban areas			
		Less than 30 000	30 000 to 99 999	100 000 to 499 999	500 000 and over
Size of family unit	Current dollars				
1 person	15 262	17 364	18 976	19 094	22 171
2 persons	19 000	21 615	23 623	23 769	27 601
3 persons	23 358	26 573	29 041	29 222	33 933
4 persons	28 361	32 264	35 261	35 480	41 198
5 persons	32 165	36 594	39 992	40 239	46 727
6 persons	36 278	41 272	45 105	45 385	52 699
7+ persons	40 390	45 950	50 218	50 529	58 673

Table 3 Criteria developed by Green Communities Canada to determine low-income eligibility

Household size	Maximum gross annual income[17]
One	$32,000
Two	$34,500
Three	$37,000
Four	$39,500
Four+	$39,500 + $2,500 for each additional occupant

DE: "We concur with the first bullet on eligibility criteria that says 'the primary or secondary name on the gas bill that is a recipient of social benefits.' We believe that these are the poorest customers and have to be prioritized. As the program funding is limited and the number of treated homes is very small compared to the low income population, utilities must ensure that this group is given priority. Perhaps this principle may be revisited in subsequent years. We do not concur with the second [refers to using a LICO table] and third criteria [refers to using the Green Communities modified LICO table of Table 4 above]".

Union: "Union has requested on numerous occasions to see the methodology behind the numbers put forward in the Green Communities LICO table and none has been provided. Without receiving any justification behind using modified LICO levels, Union is of the opinion that LICO levels as set-out by Statistics Canada should be the basis for any LICO table used in program design."

VECC: "Eligibility criteria for conservation programs should be broader than those for financial assistance. The Board endorses 125% of LICO and Enbridge uses 140% of LICO. A LICO-based threshold should remain but that should be equal to 125% (or a higher level, e.g. 140%)."

3.4 Program measures

Consensus

There are two main types of energy measures: basic and extended. Basic measures are those that are inexpensive and easy to install. No formal

[17] Income levels are pre-tax

audit is required before doing the installation. Basic measures can include, but are not limited to:

- Low-flow showerheads
- Faucet aerators
- Pipe wrap
- Programmable thermostats set at time of installation and with instruction on use
- Novitherm reflective panels

Each natural gas utility can select basic measures for the 2010 program. However, to the extent practical in 2010 there should be consistency in the basic measure offerings across the natural gas utilities' franchise areas and between both natural gas utilities.

Extended measures are more expensive measures with greater energy savings. They are more complex to install and therefore require specialized training to carry out the installation. Which extended measures to install must be determined based on an energy audit conducted by a qualified energy auditor using the smart protocol developed by the natural gas utilities. Extended measures can include, but are not limited to:

- Weatherization
    - Insulation (basement, wall, attic)
    - Draft proofing (caulking, weatherstripping, door sweeps)
- High efficiency gas furnaces
- High efficiency water heaters
- Tankless water heaters
- Drain water heat recovery
- Renewables (e.g. solar hot water)

Each natural gas utility can select extended measures for the 2010 program, but is required to make weatherization measures a priority. However, in 2010 there should be consistency in a core of extended measure offerings across the distributor's franchise areas and between both natural gas utilities, recognizing that there may be unique opportunities in one particular geographic area not offered elsewhere in 2010 (e.g. opportunities in Toronto to leverage a range of incentives for solar hot water).

Non-consensus

Issue: Should electricity measures be included?

Compact florescent light bulbs ("CFLs") are delivered to certain low-income participants now as part of natural gas DSM. There was not consensus with the continued delivery of easy to install lighting and controls such as CFLs and motion sensors. The opposing view is presented below.

CHEC: "We recommend that the electric measures be removed from the list of measures to be applied in the basic program giving the rationale that removal of these from the gas program will assist in driving partnering between the gas and electric companies to make these measures available to the low income sector in a coordinated manner."

3.5 Screening

Consensus

The CWG reached consensus on the following points related to screening for extended measures.

- The same screening methodology is to be used by both natural gas utilities.
- If a measure meets at least one of the following criteria, it is eligible for inclusion at the program level:
  - The measure is commonly included in low-income programs in other jurisdictions
  - The measure is included in either federal or provincial energy efficiency programs

A smart protocol, common to both natural gas utilities, will be developed for screening of measures.

- The smart protocol will be used to determine which measures can be installed in the low-income residence
- The smart protocol will be developed by the natural gas utilities and may be based on existing protocols from other programs
- The smart protocol is to be submitted with each natural gas utility's low-income DSM plan for Board approval
- Natural gas utilities should provide a rationale for inclusion of each measure included in the smart protocol

- The smart protocol should address the sequencing of extended measures

- The smart protocol may be revised after one year of this program, as this is the first year of the program and a learning process

- The smart protocol should include a checkbox for education, to ensure that the education component of the program is completed

Non-consensus

Issue: Should TRC be used for program screening?

The majority of CWG members agreed that TRC is not a suitable screen for a low-income program. A report by Board Staff on trends in DSM and CDM benefit-cost metrics which was prepared to assist CWG members in their discussions on TRC can be found in Appendix D.

For those CWG members with the view that TRC is not a suitable screen they offered the following rationale:

- TRC does not capture all the benefits that will accrue to program participants such as increased home comfort, improved safety and health of residents, avoided homelessness and dislocation, reductions in school dropouts from low-income families, and improved state of general dwelling. It is difficult to capture these benefits because it is difficult to assign a dollar value to them.

- TRC will be lower for low-income DSM than traditional DSM for the installation of the same measures because the full cost rather than the incremental cost of the measure must be included in the calculation since the program has no cost to the program participant. For example, if a low-income energy household was not going to replace their furnace, the full cost of the furnace would be used for the TRC calculation. This is different from a traditional DSM program where the assumption is that the household would be replacing their furnace, and the TRC calculation would use only the incremental cost of upgrading to a high efficiency furnace.

- TRC will be lower as the program will require installation of more expensive deeper measures and in dwellings that may have complex installation difficulties to overcome that would be screened out in a traditional TRC driven DSM program.

- TRC is a test that measures cost-effectiveness based on avoided costs to the natural gas utility and to the participant. Valuation of avoided costs puts an undue priority on measures with least-cost first, which makes it a poor tool for planning purposes. What is needed instead is a test which focuses on the impacts to the participant and values future benefits, as these will contribute to a more energy secure future for participants.

For those CWG members that did not agree with the dismissal of TRC as a screen they offered the following rationale:

GCC: "The program is ratepayer funded and will ultimately have to justify itself at least partly in terms of TRC. We do not agree with the general dismissal of TRC. We feel [the working group's] discussion has been confused due to inadequate understanding. To clarify: no one suggested that the entire program should screen TRC positive—a Societal Cost Test was proposed, expressed as an adder to TRC, e.g. 30%, reflecting the additional societal benefits of a low-income program—at the very least the 2010 program as a whole should meet a TRC minimum (a level below which the program is clearly indefensible)."

Issue: Is simple payback the appropriate way to screen measures?

The majority of the CWG members agreed to the use of simple payback as the screening mechanism for measures. For those that agreed to use a simple payback, they also agreed that the smart protocol should be based on the payback of the measure or groups of measures (e.g. thermal envelope, heating system). They also agreed that: the natural gas utilities should provide a rationale for inclusion of the measure and the selected payback; a rationale should also be provided for the use of measures where payback is longer than the life of the measure (e.g. solar hot water heaters); and that the natural gas utilities should relate paybacks to TRC using 2008 DSM data for comparative and information purposes.

Enbridge: Enbridge does not support the use of a simple payback. Using "a simple payback calculation for measure screening is unsuitable, primarily because of the variability of energy prices from year to year, which may make some measures cost effective one year and not cost effective the next (see below for sample calculations submitted by Enbridge). A payback criterion will also limit the inclusion of some more costly measures, such as some renewable measures which would otherwise be unattainable by low-income consumers, yet have been identified by the Province as key elements of the solution to our energy needs of the future."

Enbridge presented a two-stage screening as an alternative. For the first stage, "Enbridge proposes that as long as a measure meets at least one of the following three criteria, it should be eligible for inclusion in the low-income program:

- The measure has been shown to be TRC positive in the traditional DSM portfolio
- The measure is commonly included in other low-income programs in other jurisdictions
- The measure is included in either the province's Home Energy Retrofit Program or the federal government's ecoENERGY program measures list, or has been identified in the Green Energy Act as a measure which can make a positive contribution to the province's energy goals."

Most CWG members agreed to the criteria in the first stage of the screening. One member offered a differing view.

VECC: "The first criterion, the measure has been shown to be TRC positive in the traditional DSM portfolio, is not useful since the key cost assumptions differ for the traditional DSM portfolio and the LI portfolio. The general screening should be done based on payback criteria. "

For the second stage Enbridge proposed: "The second stage at which measures should be screened is at the household level, when the service provider is faced with a decision on what measures to recommend for installation. The results of the home energy audit will make recommendations based on the audit findings, and this should be the baseline for choosing measures which might be installed. In addition, Enbridge proposes that it provide smart protocols for the service provider to rely on, to ensure that we are only installing the measures that will have a significant impact on energy consumption.

To illustrate the potential impact of adopting a payback criterion for this purpose, consider the following sample payback calculations using two different gas commodity rates, one year apart:

SIMPLE PAYBACK CALCULATIONS USING VARIABLE COMMODITY RATES							
	Installed Cost	**Measure Life (Years)**	**Gas Savings**	**Gas Supply Charge (cents per m^3) (commodity cost)**	**Enbridge QRAM date**	**Operating Cost Savings Per Year**	**Simple Payback (Years)**
Furnace	$4,000	18	385	20.4349	1-Jul-2009	$78.67	51
	$4,000	18	385	39.0121	1-Jul-2008	$150.20	27
Weatherization	$2,600	23	1134	20.4349	1-Jul-2009	$231.73	11
(2009 costs/savings)	$2,600	23	1134	39.0121	1-Jul-2008	$442.40	6

Note that the variation in actual gas commodity rates only 12 months apart results in an almost doubling of the payback period for these two measures. While these two commodity rates present the extremes in rate variability over the last few years, the message is clear: simple payback as a screening criterion is only potentially useful as a guide, and not as a firm requirement.

Also note that the payback calculations above for furnace replacements – a key extended measure in the 2010 framework – show paybacks well beyond the assumed measure life of a furnace, regardless of which commodity rate is used. The CWG unanimously agreed that furnaces should be part of the suite of extended measures, and Enbridge agrees – a furnace is typically the single largest energy consuming gas appliance in a home, and a $78 - $150 annual energy bill savings can be significant to a low-income consumer. However, with a simple payback criterion, this measure would be excluded except in the most extreme circumstances (i.e. extremely old or inefficient existing furnace).

Enbridge submits that the smart protocols outlined in Section 3.5 of the CWG Final Report should be detailed enough for the low-income program service providers to make screening decisions in the field, and should be rationalized on the basis of a number of considerations:

- A minimum amount of gas/bill savings resulting from the measure
- Expert industry input on ages/efficiencies of equipment that should be replaced
- Existing protocols used by other parties in similar programs

These protocols will be defined in the utilities' detailed program plans to be submitted to the Board."

The second stage of the screening process, as it relates to payback, that was proposed by Enbridge was not accepted by any members of the CWG. Elements of the screening process related to auditing and the use of smart protocols were agreed to by the CWG. See Section 3.5 for details.

3.6 Program delivery

Consensus

In delivering the program, the natural gas utilities are expected to engage in, where appropriate, collaborative efforts with partners such as private, not-for-profit and public partners, and to try to enhance delivery capacity in their franchise areas where the program is being delivered in 2010 and beyond. In choosing specific partners, the natural gas utilities are expected to continue with their existing tendering practices.

Non-consensus

There were no differing views with the consensus reached.

3.7 Education and training

Consensus

Education and training must be a standard component of the low-income DSM program. Education and training are needed for low-income residents to "help them to help themselves," so that they can become a part of the conservation culture, and for landlords and housing providers so that they can help to sustain the energy savings achieved. As well, education and training is needed so that program participants understand the benefits of participating in the program and in conservation efforts. It is important to consider using channel partners for education and training.

Non-consensus

There were no differing views with the consensus reached.

3.8 Budget and targets

Consensus

Consensus was reached by the CWG that any 3rd party funding obtained is to be spent on extended measures.

The CWG agreed that approval to roll over any incentive dollars into the next year's budget is necessary. This budget augmentation at the beginning of the program delivery year will enable the natural gas utilities to increase their targets and funding of extended measures.

In determining its proposed budget and targets for low-income DSM, as well as for other DSM programs, each natural gas utility takes into account the rate impact of the program. In addition, each natural gas utility considers the rate impact due to other utility activities, changes in the economy (e.g. introduction of the harmonized sales tax, rising natural gas prices), and other factors. The CWG pointed out that in a given year where the rate impact to residential customers is expected to be higher than typical, this will impact low-income customers more severely. Therefore, in general, and in such times of hardship particularly, it is imperative that the natural gas utilities ensure that the low-income DSM program remains robust even as these cost pressures increase.

Consensus was reached on most of the elements of the scorecard model. This model is similar in structure to that used by the natural gas utilities for market transformation programs. Consensus was reached on the following metrics for the scorecard: basic measure participants, extended measure participants, and total lifetime gas savings for extended measures participants only (m^3). Consensus was also reached on the gradation of incentives (50%, 100%, 150%), and on the requirement for weightings such that extended measures are weighted higher than basic measures. Consensus was not reached on all of the metrics that should be included or the specific weightings. However, the CWG agreed that the majority of the weight should be assigned to the extended measures and to the total lifetime gas savings from the extended measures. The CWG also agreed that the scorecard metrics would not vary between the two natural gas utilities, although the associated weightings may vary.

The following scorecard in Table 4 was agreed to by the CWG.

Table 4 Scorecard

Performance metric	**Performance level**			**Target weights (%)**
	50% of target	**100% of target**	**150% of target**	
Basic measure participants				
Extended measure participants				
Total lifetime gas savings for extended measures participants only (m^3)				

The CWG deemed these items important and agreed that the following performance metrics will be tracked and reported by the natural gas utilities to the Board:

- Percent of participants referred to the program by social service agencies
- Increase in the number of communities served by extended measures
- Number of extended measure participants referred from the basic measures program

The CWG agreed that both natural gas utilities are to make a commitment to the Board:

- Increasing the number of geographic communities served[18]
- Including education and (staff) training in the low-income program
- Serving both social housing and private sector households

[18] Enbridge agreed that this goal should be pursued on a best efforts basis, where possible in 2010, but not at the expense of program quality in the short-term.

Non-consensus

Issue: Should the budget for the basic measures be siloed and capped?

The majority of the CWG agreed that the budget for the basic measures will be siloed from the rest of the program budget and capped such that funds allocated for extended measures cannot be transferred and used for basic measures.

The CWG members that did not agree with the silo-ing and capping of the budget offered the following rationale:

Union: "Union strongly disagrees with the position that the basic measure budget be capped. Best efforts were made to show the CWG the anticipated budget spent per measure, however Union cannot predict nor control any potential price increases in the market for delivery of the programs. For this reason, Union needs flexibility to spend their budgets where needed in order to achieve program targets. For example, if Union is able to under-spend on the basic measures there should be flexibility to use the remaining budget on deeper measures."

Issue: Is the DSM budget proposed by Enbridge for 2010 appropriate?

Enbridge proposed a DSM budget of $9.7 million ("M") for 2010. Enbridge estimated that the expected rate impact on residential customers of this budget would be approximately 1.2% on total bill, excluding commodity charges or about $6 per residential customer per year. The 2009 Board-approved budget for low-income DSM is $1,433,250 plus an additional $170,000 for low-income market transformation programs.

The comments of CWG members that objected to Enbridge's budget of $9.7M are presented below.

DE: " Enbridge's LI DSM budget is likely to produce a significant rate impact, especially when combined with the sales tax harmonization and the Incentive Regulated Mechanism that will likely affect rates in 2010. We recommend that Enbridge both decreases the number of basic measures participants and reduces the average amount spent per home on 'extended measures'."

GEC and LIEN: Both proposed a budget for Enbridge of $4M for 2010.

VECC: "The budget increase proposed by Enbridge results in unacceptable rate impacts (~1.2%) for non-participants (the majority of residential consumers including low income families). Enbridge has a 2009 Distribution Revenue Requirement of about $1 billion. For 2010 this will be increased by a forecast CPI-0.6%. This could result in an increase of about 1.4% or $14M. Accordingly the combined rate impact will be about 2% or $20M and is not reasonable. The rate increase should be capped to about a 0.5% impact, ~$4.5M. Additional funds from federal and provincial programs would be used to increase the overall budget."

Issue: Is the DSM budget proposed by Union for 2010 appropriate?

Union proposed a DSM budget of $3M for 2010. The comments of those CWG members that objected to Union's budget of $3M are presented below. The 2009 Board-approved budget for low-income DSM is $1,573,000 plus an additional $170,000 for low-income market transformation programs.

CHEC: "Currently, Enbridge has a rate impact of 1.2% and Union a rate impact of 0.5%. A budget that proposes a 1% rate increase may be more appropriate to ensure a higher level of deep measures."

DE: "Union's proposed budget doubles the number of deep measures participants, while not producing significant rate increases. We feel that increasing the number of extended measures participants further is reasonable for next year. The increase could be accommodated if Union seeks further efficiency and lowers the average amount of extended measures per home."

GEC: GEC proposed a budget for Union of $1.6M for 2010.

LIEN: LIEN proposed a budget for Union of $2.8M for 2010.

SHSC: "The budget allocated [should be] increased as it appears low for deep measures."

Issue: Is the budget per participant proposed by Enbridge and Union for 2010 appropriate?

Enbridge and Union proposed a budget per participant of $6000 for the 2010 program. The comments of those CWG members that objected to this cost per participant of $6000 are presented below.

DE: "We recommend that Enbridge both decreases the number of basic measures participants and reduces the average amount spent per home on 'extended measures'."

GEC: "Note that our experience with data from ecoENERGY suggests that the utility budgets per participant are high both because they appear to assume programs that are not as effective as is possible with a well-designed program that avails itself of economies of scale and because they assume a high level of furnace replacement which may be unwarranted."

LIEN: "LIEN clarifies that its recommended budget of $4,000 per participant (Draft Report, at 16) is not intended to represent a ceiling on expenditures. Rather, it submits this as an estimate of the average cost per participant."

Issue: Is the budget for education and training proposed by Enbridge and Union for 2010 appropriate?

Enbridge and Union proposed budgets of $0.1M and $0.05M, respectively, for the 2010 program. The comments of those CWG members that objected to these budgets are presented below.

SHSC: "Program savings can be increased through effective education and training. Housing staff in the low-income social housing sector need to be educated to understand the energy efficiency opportunities in their buildings and how to properly operate and maintain energy efficient equipment in order to sustain the energy savings and life-cycle of the equipment. Both Enbridge and Union have allocated insufficient budget to adequately address the educational and training needs of the low-income social housing sector. Residents of social housing need the tools to help them help themselves as the foundation towards a culture of conservation. This should be a priority with any DSM and CDM program to minimize the need for LEAP financial support to avoid disconnections and energy poverty."

VECC: "The Budget for E&T is too low."

Issue: Are the targets proposed by Enbridge and Union appropriate?

Enbridge proposes a target of 5,000 for basic measures participants, representing a 0% increase from the 2009 Board-approved low-income plan, and a target of 1,000 for extended measures participants, representing a 150% increase from the 2009 Board-approved low-income plan.

Union proposes a target of 6,000 for basic measures participants, representing a 33% decrease from the 2009 Board-approved low-income plan, and a target of 250 for extended measures participants, representing a 100% increase for extended measures participants from the 2009 Board-approved low-income plan.

The comments of those CWG members that did not agree with the targets presented by Enbridge and Union are presented below.

CHEC: "If the 125 extended measures are delivered by Union in 2009, the channel partners are established, and the processes refined, a higher number of installs in 2010 may be appropriate for a target."

DE: "We believe that it is important to emphasize that basic measures should continue but on a reduced scale. Natural gas utilities have been generously compensated through their shareholder incentive mechanism for delivering basic measures in the past. We recommend that Enbridge decreases the number of basic measures participants. We recommend that Union increases the number of treated homes."

SHSC: "Although Union has doubled its targets for extended measures from 2009 we feel that this could be increased from 250 to 350."

VECC: "The targets for extended measures are low and the use of matching funds is required to increase both targets and budgets. Targets for extended measures should be increased at the expense of basic measures (i.e. no budget increase). There should be separate targets for single-family owner occupied and social housing units. The latter targets are easier to reach and the per unit savings (due to archetype) may be lower. "

Issue: What performance metrics should be included in the scorecard?

The majority of the CWG members agreed that the scorecard should consist of the following performance metrics: basic measures participants, extended measures participants, total lifetime gas savings for extended measures participants only (m^3).

At issue is whether an additional metric should be added for education and training.

SHSC: "Education and training should be on the scorecard."

Issue: What is the appropriate weighting of the scorecard metrics?

The natural gas utilities proposed metric weightings for the scorecard of 20%/40%/40% for the number of basic measures participants, number of extended measures participants and total gas savings for extended measures participants (m^3) respectively. This weighting did not receive support from other CWG members.

An alternative weighting of 10%/45%/45% was raised at the CWG meeting #5, however, the written submissions of most members did not address this alternative. The views expressed in the written submission on the weighting of the metrics are presented below.

CHEC: "From the discussions at CWG #5 it would appear that the basic measures should be provided a maximum of 15% of the total incentive."

DE: "The scorecard for each utility will include three performance metrics: 1) Basic measures participants (#) – weight 10%; 2) Deep measures participants (#) –weight 45%; 3) Total gas savings for deep measures participants (m^3) –weight 45%."

GCC: "GCC agrees with the proposed incentive weighting: 10% (basic), 45% (extended measures participants), and 45% (total gas savings)."

VECC: "The scorecard approach is directionally correct but it should be tested to ensure that resulting incentives do not produce perverse or unanticipated outcomes. The scorecard should be weighted more to actual energy savings and to extended measures. "

3.9 Incentive structure

Consensus

The CWG reached consensus on the principles for the incentive structure:

- Level of incentive is to be reflective of the level of the natural gas utilities' activity and effort
- The incentive is to have some relationship to the benefits achieved
- Incentive levels are to be large enough to attract the natural gas utilities' management attention
- Incentive levels are to be comparable to those obtained through non-low-income DSM

Consensus was not reached on the details of the incentive structure, or whether a threshold and/or a cap should be in place on the incentives. Discussion of these differing views is presented in the non-consensus section below.

Non-consensus

Issue: Is the incentive structure appropriate?

Most of the CWG members agreed to the scorecard model as the basis for the incentive structure, which provides for an incentive based on performance levels of achieving 50%, 100% and 150% of the particular metric. One CWG member offered a differing view.

DE: Direct Energy proposed an incentive structure based on the variable cost with an adder. "An adder as a function of variable costs would incentivize utilities to implement more measures. However, the overall incentive should be capped at a reasonable threshold in relation to the total program budget. Finally, and to recognize that there are fixed costs involved in running the program and that there should be enough financial interest for executives to dedicate attention to program success, a minimum incentive threshold for reaching 100% of the target must be established."

Issue: Are the incentive levels proposed by the utilities appropriate?

Enbridge proposed an incentive level of $750,000, and Union an incentive level of $650,000.

No consensus was reached on the incentive level for either natural gas utility. The views expressed in the written submissions of the CWG members regarding the level of incentive are presented below. For more details on Enbridge's incentive structure, see their written submission in Appendix C.

CHEC: "The incentives proposed by the utilities seem too high for the low income portfolio. The incentive levels suggested by the CWG [revised draft report on the proposed short-term (2010) framework for low-income DSM] may be more appropriate." [These levels are 150,000 at 75% of the target, $250,000 at 100% of the target, and $350,000 at 150% of the target (capped)]."

GCC: "We support lower incentives as per GEC recommendation, i.e., in $550K range. Green Communities believes $650K is an excessively high incentive for Union relative to Enbridge – we think the Board should develop a proportionate incentive."

GEC: "The incentive level of $750,000 proposed by Enbridge is:

- 2.5 times the level of in-house spending (0.3M on labour, expenses, evaluation and research)
- $750 per extended measure participant

  As such GEC believes this is somewhat higher than appropriate. GEC proposes that the incentive should reflect customer benefits, LDC effort, and be suitable to attract senior management attention. An incentive of $500/extended measure participant (roughly 10-20% of benefits) is a fair sharing, is more than ample to reward LDC effort and, at $500,000 to $750,000 (at the 100 and 150% reward levels) is adequate to attract senior management attention. We propose an additional 10% incentive for the basic participant program ($50,000 for the 100% level).

The incentive level of $650,000 proposed by Union is:

- 2.65 times the level of in-house spending (0.25M on labour, expenses, evaluation and research)

- $2600 per extended measure participant

  As such GEC believes this is higher than appropriate. An incentive of $500/extended measure participant is a fair sharing, and is more than ample to reward LDC effort, but, at $125,000 to $150,000 (at the 100 and 150% reward levels) is judged inadequate to attract senior management attention. Accordingly, for 2010, for Union, we would double the $500/extended participant level we have proposed for Enbridge to ensure management attention (i.e. $250,000 to $300,000 at the 100 and 150% levels). We propose an additional 10% incentive for the basic participant program ($25,000 for 100% level). "

LIEN: "LIEN also supports the incentive levels in the strawman proposal in the CWG Draft Report as described under the views of CHEC above."

VECC: "CWG has not assessed incentives in the context of the new scorecard and program structure (basic vs. deep and private vs. social housing).

- Both utilities propose too much weighting on activity measures (participants) as opposed to quantitative energy savings

- No detail is provided as to how either compensation for participants or energy savings will be determined at 50-150% of target.

- Level of incentive appears to be main driver for scorecard weightings proposed rather than the other way around

- The overall incentive seems to be about 7.5% of budget for Enbridge and 20% for Union. These levels are well above the current TRC-based SSM and the 5% of net TRC available to electric CDM.

- The level of SSM incentive (based on savings) should be in the order of 5-10%.

- The incentive for both utilities should be tied to (audited) energy savings and be a true Shared Savings Mechanism

- Incentives for basic measures (based on the scorecard) should not exceed those for the "regular" LI DSM programs to date. It is understood that for Union this is the case and is not appropriate."

Issue: Should the incentive level be capped?

The natural gas utilities did not propose a cap on the incentive level.

There was no consensus achieved among the CWG members whether there should be a cap on the incentive and, if so, to what incentive level the cap should be applied.

The views expressed in the written submissions of the CWG members regarding a cap on the incentive are presented below.

CHEC: "There should be no cap on the incentive as a question of principle if there is belief that the budget limits the potential incentive. Whether to have a cap or not may be better determined once the "total gas savings" number is added into the scorecard."

DE: "The overall incentive should be capped at a reasonable threshold in relation to the total program budget."

Enbridge: "There should be no cap on the incentive level, to ensure the utilities are motivated to achieve greater success, and to prevent the suspension of program delivery if the cap is reached before year-end. There are already some agreed-upon indirect capping mechanisms in the framework to offer the Board some reassurance that the incentive payment will not continue to grow unchecked. The approved budget acts as an indirect cap on continued program delivery beyond the target. Similarly, the agreed-upon limit to the basic measures budget will prevent re-allocation of funds from extended measures to the less expensive basic measures, which will also indirectly cap potential incentive earnings by the utilities."

GEC: "We accept the scorecard given a segregated and capped budget for basic participants, and 150% incentive cap(s) to ensure that the LDCs pursue all aspects of the scorecard and not obtain excessive incentives for easier metrics. The levels of participation for basic level measures are already demonstrated to be achievable, and require no innovation, so the capping of incentive and budget is particularly important for that category. While there is a strong argument for no overall cap (to encourage continued improvement) we submit that the overall level of available incentives should also be capped to maintain the acceptability of the LI program to other ratepayers. "

LIEN: "We endorse a capped incentive structure. Providing an uncapped incentive creates an unbalanced regulatory structure. It allows for an unlimited upside potential while providing no penalties for a failure to meet minimum performance standards. Should an uncapped incentive be considered, it should be coupled with a discussion of penalties imposed for a failure to perform."

Union: "Union proposes that there be no cap on the incentive in order to encourage the utilities to continue to deliver the program beyond set targets if achievable. Union put their best efforts forward to develop aggressive targets based on past program performance. However, if Union is in a position to overachieve on targets we should be incented to do so."

Issue: Should there be a basic threshold for incentives?

The natural gas utilities presented the current model of the DSM incentive threshold, which rewards the natural gas utilities effort for the first cubic meter saved. There was no consensus on what the appropriate threshold should be for triggering the receipt of the incentive.

The views expressed in the written submissions of the CWG members regarding a threshold for the incentive are presented below.

DE: "To recognize that there are fixed costs involved in running the program and that there should be enough financial interest for executives to dedicate due attention to program success, a minimum incentive threshold for reaching 100% of the target must be established."

GEC: "We accept the scorecard given the threshold at 50% before which no incentives are available. This will avoid paying for mediocre performance and to concentrate incentive dollars on the task of encouraging performance at the margin."

Union: "Union proposes that there should be no threshold for incentives. For example, Union should be able to receive a 25% payout as this is consistent with our current SSM structure. A significant level of effort is required to design programs and to develop the support infrastructure (i.e. marketing and outreach) and therefore Union should be able to start earning from dollar one."

3.10 Program research needed in 2010

Consensus

In order to ensure a smooth and successful ramp up of the low-income program in 2011 and beyond, it will be necessary for the natural gas utilities to conduct program research to support program development. CWG recommends that the natural gas utilities do the following research in 2010:

- Research the opportunity and implications of offering on-bill financing in subsequent years for the purchase or rental of new high efficiency gas furnaces and hot water heaters for low-income consumers[19]

- Investigate how to penetrate the missing low-income market segments that were not offered the low-income program in 2010, including low rise rental housing and high rise multi-residential market rate apartments with utilities included in rent

Non-consensus

There were no differing views with the consensus reached.

3.11 Additional framework components: LRAM, DSMVA, evaluation and reporting

Consensus

The CWG reached consensus on having a DSMVA for basic and extended measures. It was agreed that a DSMVA of 15% would be applied to the siloed basic measures budget; however, no consensus was reached on the percentage for the DSMVA for the extended measures budget. This issue is discussed in non-consensus section below.

The CWG reached consensus on general reporting requirements, with the natural gas utilities having to report on the elements of the framework as described in this report, such as education and training, research, budgets, targets, and incentives. The CWG agreed that there is a need for monitoring and evaluation to inform future budgets and targets. Section 3.8 - Screening contains a more detailed list of the natural gas utilities' commitments and items for yearly evaluation.

Non-consensus

Issue: What is the appropriate level for the DMSVA?

The natural gas utilities proposed an increase to the DSMVA from 15% to 25%.

CWG members agreed to a DSMVA of 15% on the siloed basic measure budget, but did not reach consensus on what the appropriate level for the DSMVA should be for extended measures.

The views expressed in the written submissions of the CWG members regarding the appropriate level for the DSMVA are presented below.

---

[19] Manitoba Hydro offers on-bill financing to offset a portion of the cost of the new equipment.

DE: “Yes, we concur conditional on the amendment that the basic measure VA stays at the current 15% level, while the extended measures component VA is raised to a 25% level to recognize the uncertainty of the program and the need for continuous funding.”

VECC: “Disagree with Enbridge that the current 15% cap on DSMVA funding be increased to 25% for low-income. We feel 25% of ~$9.7M is too high and even the current 15% may be too high. However, if as suggested, the 2010 budget is reduced to ~$4.5M (plus federal and provincial funds) then the 25% proposed by Enbridge would be acceptable. Also, the CWG process does not allow time to settle on additional framework components. Accordingly, Board staff should contract this work.”

Appendix A. Proposed short-term frameworks submitted by the natural gas utilities

This appendix contains the proposed short-term frameworks submitted by Enbridge and Union on July 28th in response to the July 24th draft report on the short-term framework.

Appendix B. Comments from CWG members on revised draft short-term framework report and the natural gas utilities' proposals

This appendix contains the comments submitted by the CWG members on the draft report (July 24th) and on the Enbridge and Union proposals. These comments were provided using a template prepared by IndEco which asked the CWG members to indicate agreement or non-agreement with the elements of the framework described in the draft report (July 24th) and in the Union and Enbridge proposals. A blank copy of this template has also been provided as part of this appendix. The comments presented in the appendix are as they were received by the facilitator; the only modification that has been made is to add the name of the CWG member that submitted the template.

All of the comments received in this template format and additional comments received prior to the submission deadline were incorporated into the final report and are provided in this appendix.

- Blank template
- CHEC
- DE
- EDA
- GCC
- GEC
- Hydro One
- LIEN
- SHSC
- VECC

Appendix C. Comments from CWG members on the draft final report on the proposed short-term (2010) framework for natural gas low-income DSM

This appendix contains all of the comments submitted by the CWG members in response to the draft final report of August 12th on the proposed short-term framework. The comments presented in the appendix are as they were received by the facilitator.

- CHEC
- City of Toronto
- Enbridge
- Union
- VECC

Appendix D. Trends in DSM and CDM Benefit-Cost Tests

specializing in industrial ecology and strategic management
providing environmental and energy consulting to private, public and non-governmental organizations

IndEco Strategic Consulting Inc
77 Mowat Avenue Suite 412 Toronto ON M6K 3E3
416 532 4333 ***info@indeco.comindeco.com***