

500 Consumers Road  
North York, Ontario M2J 1P8  
PO Box 650  
Scarborough ON M1K 5E3

**Bonnie Jean Adams**  
**Regulatory Coordinator**  
phone: (416) 495-6409  
fax: (416) 495-6072  
Email: [bonnie.adams@enbridge.com](mailto:bonnie.adams@enbridge.com)



November 13, 2009

**VIA COURIER**

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, Suite 2700  
Toronto, ON M4P 1E4

**Re: Enbridge Gas Distribution Inc. ("Enbridge")**  
**EB-2009-0154 2010 Natural Gas Demand Side Management (DSM) Plan**

In accordance with the Ontario Energy Board's (the "Board") Procedural Order dated October 26, 2009 enclosed please find the interrogatory responses of Enbridge.

Also enclosed please find the updated Exhibit List, Exhibit A, Tab 1, Schedule 1.

The submission has been filed through the Board's Regulatory Electronic Submission System ("RESS"), two copies are being delivered by courier and the evidence will be available on the Enbridge website at [www.enbridge.com/ratecase](http://www.enbridge.com/ratecase) as of November 14, 2009.

If you have any questions, please contact the undersigned.

Yours truly,

A handwritten signature in blue ink that reads 'Bonnie Jean Adams'.

Bonnie Jean Adams  
Regulatory Coordinator

cc: EB-2009-0154 Interest Parties (via email)

## EXHIBIT LIST AND DESCRIPTIONS

### A- ADMINISTRATIVE

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Title</u>	<u>Description</u>	<u>Witness(es)</u>
<u>A</u>	1	1	Exhibit List and Description		M. Brophy

### B- EVIDENCE

<u>B</u>	1	1	2010 Demand Side Management Plan - Summary	Provides a summary of the 2010 DSM Plan and orientation for the layout of evidence. Provides context for how the Plan relates to Board Decisions on the 2007-2009 Framework, the Company's Plan for 2007-2009 and the 2010 Program Assumptions.	M. Brophy P. Squires
		2	Summary of 2010 Budget	Provides a volumetric estimate and O&M budget estimate for the year 2010. The budget estimate was prepared in compliance with the Board's Framework decision.	M. Brophy P. Squires
		3	Fiscal 2010 DSM Monitoring and Evaluation Plan	The process for Evaluation and Audit was approved in the Board's Framework decision. This section outlines a priority list for evaluation activities for 2010 identified by the Company in consultation with the Evaluation and Audit Committee.	M. Brophy P. Squires
		4	Market Transformation	Provides a set of Market Transformation Programs, metrics and incentives developed by the Company in accordance with the Board's Framework decision.	M. Brophy P. Squires

EXHIBIT LIST AND DESCRIPTIONS

B- EVIDENCE

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Title</u>	<u>Description</u>	<u>Witness(es)</u>
<u>B</u>	1	5	Drain Water Heat Recovery System Market Transformation Program	Provides a program update	M. Brophy P. Squires
	2	1	Program Descriptions	Provides a program description for programs proposed as part of the 2010 Plan.	M. Brophy P. Squires
	3	1	New Programs and Program Assumptions	This section includes assumption information and substantiation for programs elements that are supplemental to the Board Decision dated April 30, 2009. These supplement the "measure specific" assumption approved by the Board to form a complete set of approved program assumptions.	M. Brophy P. Squires
		2	EGD DSM Input Assumptions for 2010 Program Year	Table of Program Assumptions	M. Brophy P. Squires
		3	Substantiation Sheets for Selected 2010 Input Assumptions	Substantiation Sheets	M. Brophy T. MacLean P. Squires
		4	2010 Free Ridership Summary	Table of Free Ridership	M. Brophy P. Squires
		5	Custom Resource Acquisitions Technologies	Table of Measure Lives	M. Brophy P. Squires

## EXHIBIT LIST AND DESCRIPTIONS

### B- EVIDENCE

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Title</u>	<u>Description</u>	<u>Witness(es)</u>
<u>B</u>	3	6	Avoided Costs		M. Brophy T. MacLean P. Squires
	4	1	Industrial Monitoring and Targeting Pilot Program	Proposal for new industrial sector support programs.	M. Brophy P. Squires

### C- SUPPORTING MATERIAL

<u>C</u>	1	1		Letter of Support – Energy Star	
		2		Letter of Support – Atlantic Packaging	
		3		Letter of Support – NRCAN	
		4		Letter of Support – CME	

### D – PHASE II – 2010 DSM LOW INCOME PLAN

<u>D</u>	1	1	2010 DSM Low Income Plan Overview	Provides an overview of the 2010 DSM Low Income Plan.	M. Brophy P. Squires
	2	1	Program Descriptions	Provides a program description for programs proposed as part of the 2010 Low Income Plan.	M. Brophy P. Squires
	3	1		Letter of Support from Social Housing Services Corporation (SHCS)	

## EXHIBIT LIST AND DESCRIPTIONS

### I – INTERROGATORIES

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Title</u>	<u>Description</u>	<u>Witness(es)</u>
I	1	1		Board Staff Interrogatories	M. Brophy P. Squires
	2	1-5		BOMA Interrogatories	M. Brophy P. Squires
	3	1-10		CCC Interrogatories	M. Brophy P. Squires
	4	1-8		CME Interrogatories	M. Brophy P. Squires
	5	1-12		GEC Interrogatories	M. Brophy P. Squires
	6	1-12		IGUA Interrogatories	M. Brophy P. Squires
	7	1-6		LIEN Interrogatories	M. Brophy P. Squires

### I – PHASE II INTERROGATORIES

I	1	1-4		Board Staff Interrogatories	M. Brophy P. Squires
	2	1		BOMA Interrogatories	M. Brophy P. Squires
	3	1-4		CCC Interrogatories	M. Brophy P. Squires
	4	1		CME Interrogatories	M. Brophy P. Squires
	5			NOT USED	
	6	1-2		IGUA Interrogatories	M. Brophy P. Squires

EXHIBIT LIST AND DESCRIPTIONS

I – INTERROGATORIES PHASE II

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Title</u>	<u>Description</u>	<u>Witness(es)</u>
I	7	1-6		LIEN Interrogatories	M. Brophy P. Squires
	8	1-6		VECC Interrogatories	M. Brophy P. Squires

INTERVENOR SUBMISSIONS

1	BOMA Submission
2	CCC Submission
3	CME Submission
4	GEC Submission
5	IGUA Submission
6	LIEN Submission

ENBRIDGE GAS DISTRIBUTION SUBMISSION

1	EGD Submission
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BOARD STAFF INTERROGATORY #1

INTERROGATORY

Ref: Exhibit D, Tab 1, Schedule 1, Page 2

Enbridge is proposing an incremental \$1.4 million for its low-income DSM budget for 200 solar thermal water heaters in social housing units, and indicates that execution of legal agreements is pending that would direct rebate dollars back to the utility, and reduce the budget requirement from \$1.4 million to \$0.9 million.

- a) In the event that there is no agreement to direct rebate dollars to the utility, will Enbridge still deliver this program?
- b) Who will benefit from the savings of this program - social housing providers or residents?
- c) What evidence does Enbridge have as to the cost effectiveness of this program?
- d) Has EGD undertaken a comparative analysis in terms of costs and savings associated with solar thermal water heaters vs. thermal envelope improvements (i.e. weatherization improvements)?
- e) If the answer to (d) is yes, what were the results of the analysis?
- f) If the answer to (d) is no, based on what criteria has EGD decided to spend \$1.4 million (or \$900,000 after rebate) for solar thermal water heaters instead of thermal envelop improvements given the latter is also qualified for federal and provincial rebates?

RESPONSE

- a) With the Ontario Energy Board's (the "Board") approval, Enbridge plans to deliver the solar thermal water heating program even if no agreement is reached with government parties to direct rebate dollars to the utility.

Witnesses: M. Brophy  
P. Squires

- b) In the cases where residents pay their own gas bills, the bill savings resulting from this program will be a direct and immediate benefit to the residents. In the cases where utilities are included in rent, social housing providers, as non-profit organizations, will re-inject operating cost savings back into their budgets to offset rising utility costs and provide necessary capital upgrades to the housing stock. Either way, the low-income consumer is the key beneficiary of the program. Under provincial regulations, operating costs for social housing providers are benchmarked and are capped at a certain amount for what they can spend on utilities. If housing providers exceed that amount, they are responsible for covering the overage from their operating budgets and therefore pay great attention to how much they are consuming and how much is spent. Energy consumption is also very important to social housing residents, as they want to keep bills low and want to participate in a conservation culture.
- c) Scorecard metrics are often used where programs are beneficial to customers, but it is difficult or impossible to apply standard cost-effectiveness tests. A simple snapshot using the Total Resource Cost (TRC) test results show this measure to have a TRC value of -\$5,647. This assumes annual gas savings of 379 m<sup>3</sup>, a measure life of 20 years, incremental equipment cost of \$7,000, and a free rider rate of zero percent. However, if market stimulation causes equipment costs to converge with that of standard water heaters, then the program is expected to become cost effective in the future. Without this type of initiative, equipment costs will never converge and the benefits will be stranded.
- d) The cost and savings assumptions in part (c) above can be compared to the assumptions filed for Enbridge's low-income weatherization program at Exhibit D, Tab 2, Schedule 1, Page 1.

Witnesses: M. Brophy  
P. Squires



e) The low-income weatherization program results in greater net benefits from a TRC perspective than the proposed solar thermal program. However, Enbridge is not proposing the solar thermal water heating program strictly as a resource-acquisition program intended to achieve TRC benefits. Enbridge's objective with this program is to pilot a more market transformation-based renewable energy program for the low-income sector that will ultimately:

- Build market capacity for solar thermal technology through the training and education of social housing providers and residents on conservation behaviours and solar thermal equipment maintenance
- Increase demand for this renewable technology through installations and raised awareness, which will in turn contribute to downward pressure on price over time and improve cost effectiveness
- Expand the suite of deep retrofit measures available to the low-income segment (an objective that was clearly supported by the Board's Low Income Conservation Working group in July-August 2009)
- Provide low-income consumers with an opportunity to advance the province's "green energy" goals through their own adoption of renewable energy technology

f) Refer to 9(e), above.

BOARD STAFF INTERROGATORY #2

INTERROGATORY

Ref: Exhibit D, Tab 2, Schedule 1, Page 1 (Low Income Weatherization Program)

Enbridge indicates that the eligibility criteria for the Weatherization program is based on a percentage of Low-Income Cut-Off (LICO).

- a) What percentage is being used? Why did Enbridge choose this screen?
- b) How will Enbridge identify/find which customers meet the eligibility criteria?
- c) Has EGD executed or plans to execute any legal agreements with the federal and provincial governments that enable EGD to take advantage of the financial rebates provided for thermal envelope improvements by the federal eco-energy and the provincial Home Energy Savings programs? If the answer is no, please explain why

RESPONSE

- a) The eligibility criteria for the low-income 2010 program will be 135% of the 500,000 plus community size before tax 2008 LICO. A customer may also qualify if they receive payments from one of a list of social assistance programs where qualification for the program is within the parameters set out above. The 135% of LICO was in recognition that the Enbridge Gas Distribution ("Enbridge") franchise area has a predominant number of low-income customers residing in urban areas where living expenses tend to be higher. At 135% of LICO the income levels are also more inclusive of the lower income working customers.
- b) Customer eligibility is screened by service providers. Customers must provide their most current tax assessment or proof of receipt of one of the eligible social service programs. Customers self identify to the program providers or Enbridge.

Witnesses: M. Brophy  
P. Squires

- c) Enbridge has not executed any legal agreements with the federal and or provincial governments for the purposes of accessing rebates from the ecoENERGY for Homes - Retrofit and Home Energy Savings programs. Enbridge is exploring the impact of executing comprehensive audits and associated costs required for the government programs before proceeding.

BOARD STAFF INTERROGATORY #3

INTERROGATORY

Ref: Exhibit D, Tab 2, Schedule 1, Page 2 (Residential Low Income Water Conservation TAPS Partners Program)

a) How will Enbridge identify/find which customers meet the eligibility criteria?

RESPONSE

a) The Low Income TAPS Program has two delivery streams. Through the first stream we receive applications through Winter Warmth agencies and other social agencies such as Ontario Disability Support Program ("ODSP") and Ontario Works ("OW") offices. When we receive applications through these agencies the income verification has been completed by the intake worker. The second delivery stream is a postal walk. Research was completed for all municipalities in the Enbridge Gas Distribution franchise, using census data, to list every 6-digit postal code in rank order of the likelihood of the postal codes to contain a high percentage (60%+) of >125% LICO households.

Witnesses: M. Brophy  
P. Squires

BOARD STAFF INTERROGATORY #4

INTERROGATORY

Ref: Exhibit D, Tab 2, Schedule 1, Page 4 (Low Income Market Transformation)

- a) What specifically is the “market” that Enbridge is trying to transform, and how will Enbridge know when it has been transformed?

RESPONSE

- a) The Low Income Market Transformation program is designed to educate Low Income customers on the impacts of their energy use and how they can benefit by using energy more efficiently. It is understood that Low Income consumers have greater barriers to understanding energy efficiency and conservation opportunities due to language barriers, lack of access to computers, poor literacy and/or communication skills, etc. In theory, this market would be transformed when the market penetration of conservation measures in Low Income households increases; however, it is anticipated that there will be an on-going need for these initiatives as long as the barriers mentioned above persist.

BOMA INTERROGATORY #1

INTERROGATORY

Ref: Exhibit D, Tab 1, Schedule 1, pages 3 & 4

- a) Which rate class or classes will the incremental \$1.4 million cost associated with the solar thermal water heat program be recovered?
- b) Has EGD executed any legal agreements to date with the federal and provincial governments that enable them to direct the rebate dollars back to the utility? If not, when does EGD expect such agreements to be executed?
- c) If EGD has written confirmation related to the federal and provincial rebate dollars flowing back to the utility before the Board approves the 2010 rate changes as proposed in EB-2009-0172, would EGD adjust the Y-factor related to DSM expenditures down by the \$0.5 million noted on page 4? If not, why not?
- d) How has the gas savings of 379 m<sup>3</sup> been estimated? In particular, please provide the assumptions used.

RESPONSE

- a) The proposed incremental \$1.4 million budget for the solar thermal program will be recoverable from residential Rate Class 1.
- b) Enbridge Gas Distribution ("Enbridge") has not executed any legal agreements to date with the federal and provincial governments that enable them to direct the rebate dollars back to the utility. Enbridge has initiated the process but it is unknown at this time when the agreements will be executed.
- c) It is unlikely that Enbridge will have written confirmation related to the federal and provincial rebate dollars flowing back to the utility before the Ontario Energy Board approves the 2010 rate changes as proposed in EB-2009-0172. In the event that

Witnesses: M. Brophy  
P. Squires

the government rebates can eventually be accessed, any rebate funds will be recorded in the Demand Side Management Variance Account ("DSMVA"). Please also refer to PHASE II Exhibit I, Tab 7, Schedule 6, part (b).

- d) The gas savings of 379 m<sup>3</sup> is based on an assumed 60% gas savings on a standard water heater load of 632 m<sup>3</sup>. This savings estimate was derived in a Queens University analysis of metered solar thermal water heater consumption at installations in Toronto.

CCC INTERROGATORY #1

INTERROGATORY

Please explain why it is appropriate for EGD, a regulated gas distribution utility to deliver a solar water heater program, funded by its residential gas consumers.

RESPONSE

Enbridge Gas Distributions ("Enbridge") Ontario Energy Board mandated DSM programs are designed to encourage and incent conservation of natural gas, resulting in reduced natural gas bills for participating customers. Solar water heating technology achieves this objective through the use of a renewable fuel source as an alternative to natural gas.

In the Enbridge low-income solar thermal water heating proposal, the cost of the program is borne by the residential gas customers as it will be residential low-income customers that are the beneficiaries of this program.

Witnesses: M. Brophy  
P.Squires



CCC INTERROGATORY #2

INTERROGATORY

Please explain why it is appropriate for EGD to be pursuing a program that has not been subjected to any cost-effectiveness test. What benefits will be delivered to the customers that are funding the program.

RESPONSE

Please refer to the response to Board Staff Interrogatory #1(c) found in PHASE II Exhibit I, Tab 1, Schedule 1 for details regarding cost effectiveness. Enbridge Gas Distribution is proposing this energy saving measure for a number of objectives and benefits other than strictly TRC value (see response to Board Staff Interrogatory #1(e) in PHASE II Exhibit I, Tab 1, Schedule 1 for details), which will ultimately benefit all residential ratepayers as they increasingly seek alternative and renewable energy options to meet their energy needs.

CCC INTERROGATORY #3

INTERROGATORY

Please provide the Total Resource Cost Test results for each of the proposed programs.

RESPONSE

In the chart below please find the Total Resource Cost Test results.

<u>Item No.</u>	<u>Program Name</u>	<u>Estimated Net TRC<sup>1</sup></u>
1	Weatherization	\$917,302
2	Enhanced TAPS	\$1,504,034
3	Market Transformation	N/A
4	Solar Thermal Water Heat	(\$5,647) (measure screening only <sup>2</sup> )

<sup>1</sup> Based on 2009 avoided costs. 2010 avoided costs not available.

<sup>2</sup> A full program screening was not completed for the Solar Program as it is not viewed as a traditional resource acquisition program. Please refer to response to PHASE II CCC Interrogatory #2 at Exhibit I, Tab 3, Schedule 2

Witnesses: M. Brophy  
P. Squires

CCC INTERROGATORY #4

INTERROGATORY

Please provide any correspondence between EGD and the Ministry of Energy and Infrastructure regarding the proposed solar water heater program.

RESPONSE

There has been no written correspondence between Enbridge Gas Distribution and the Ministry of Energy and Infrastructure regarding the proposed solar water heater program.

Witnesses: M. Brophy  
P. Squires

CME INTERROGATORY #1

INTERROGATORY

At Table 1 of Phase II, Exhibit D, Tab 1, Schedule 1, page 3 of 6, EGD summarizes its 2010 Low-income DSM Plan budget of \$3,066,980. Please confirm that this budget is allocated entirely to residential rate classes. If any portion of the budget is allocated to non-residential rate classes then please provide the following:

- (i) A table which sets out the allocation of the Low-Income DSM Plan budget by rate class; and
- (ii) An explanation of the cost allocation methodology, and in particular, the basis for allocating any portion of this budget to non-residential rate classes.

RESPONSE

- (i) and (ii) The Low Income program budgets are allocated entirely to Residential Rate Class 1.

Witnesses: M. Brophy  
P. Squires

IGUA INTERROGATORY #1

INTERROGATORY

Reference: Phase II, Ex. D/1/1, paragraph 7. EGD is proposing an incremental \$1.4 million low-income DSM expenditure for the installation of 200 solar thermal water heaters in social housing units at a reduced cost.

- (a) It is IGUA's understanding that low-income DSM expenditures are recovered from EGD's residential customer class. Please confirm that:
  - (i) This is the case.
  - (ii) The proposed \$1.4 million incremental expenditure for a solar thermal water heater initiative will also be recovered from EGD's residential customer class.
- (b) Please confirm that EGD did not consult with its Evaluation and Audit Committee (EAC) regarding this proposed incremental low-income initiative prior to filing of this application. Please explain why not.
- (c) Has EGD undertaken any other stakeholder consultations regarding this proposed initiative?

RESPONSE

- (a) (i) The proposed Low Income DSM plan is to be recovered from Enbridge Gas Distribution's ("Enbridge") residential rate class.
- (ii) The proposed \$1.4 million incremental expenditure for the solar thermal water heater initiative will also be recoverable from Enbridge's residential rate class.
- (b) Enbridge consulted with Low Income stakeholders regarding solar thermal water heating as part of the process outlined in (c) below. Enbridge received direction to design, document and file low-income plans September 28, 2009 and was required to file these plans October 15, 2009, which did not allow for additional consultation.

Witnesses: M. Brophy  
P. Squires

- (c) The July-August 2009 Ontario Energy Board (the "Board") Low Income Conservation Working Group, which consisted of several intervenors and low-income stakeholders (e.g. GEC, LIEN, VECC, SHSC, Green Communities, OPA, Union Gas, various electric LDC's, the City of Toronto) discussed at length the suitability of renewable energy technologies for the low-income segment, and agreed as one of its guiding principles that a low-income DSM framework should emphasize deep measures that may include renewable technologies. Even though the Board put on hold the Working Group's recommendations, it was clear that the majority of stakeholders supported the concept of renewables in the low-income segment. More recently, Enbridge consulted directly with Social Housing Services Corporation ("SHSC") on this initiative. SHSC's letter of support for this program is filed at Exhibit D, Tab 3, Schedule 1.

IGUA INTERROGATORY #2

INTERROGATORY

Reference: Phase II, Ex. D/1/1, paragraph 12 and page 6. Table 2 at the referenced page provides the proposed scorecard metrics for evaluation of the proposed solar thermal water heater initiative.

- (a) As there are to be no SSM or target impacts of this program in 2010, why does EGD feel that approval of a scorecard is appropriate at this time?
- (b) Please explain how development of a training plan reflects "market effects" of EGD's proposed program.
- (c) Does EGD have an ultimate objective in respect of the subject market? If so, please explain what that objective is, and how EGD plans to achieve it.

RESPONSE

- (a) Enbridge Gas Distribution ("Enbridge") proposed the scorecard found on Exhibit D, Tab1, Schedule 1, page 6 as a means of assessing the success of this program as an alternative to a TRC-based metric.
- (b) The proposed training plan is intended to have the effect of building market capacity for this renewable technology. Training related to the installation and maintenance requirements of solar thermal water heaters will raise awareness and comfort levels of social housing providers and maintenance staff on this technology, thereby increasing the likelihood of knowledge transfer to other building owners/operators and referrals.
- (c) Enbridge's objectives in delivering this program are outlined in response to Board Staff Interrogatory #1 found at PHASE II Exhibit I, Tab 1, Schedule 1. Some of these objectives are longer term and more difficult to measure, therefore only two

Witnesses: M. Brophy  
P. Squires

specific objectives are included in the scorecard at Exhibit D, Tab 1, Schedule 1, page 6.

Witnesses: M. Brophy  
P. Squires



# LIEN INTERROGATORY #1

## INTERROGATORY

Ref.: Exhibit D, Tab 1, Schedule 1, Pages 1-5

Please prepare a table that shows for each low-income Program in 2009 and proposed for 2010 the following:

- i. The type of measures
- ii. The number of communities, which communities they are, and the percentage increase in the number of communities over 2009
- iii. The number of program participants, type of participants (broken down by social housing and non-social housing) and the percentage increase in the number of participants over 2009
- iv. The retrofit cost per participant
- v. The total program cost per participant

## RESPONSE

See table below for all for responses (i) to (v).

<u>Program</u>	<u>Measures</u>	<u>Communities</u>	<u>Participants</u> <sup>1</sup>	<u>Retrofit Cost per Participant</u>	<u>Program Cost per Participant</u>
<u>2009</u>					
Enhanced TAPS	Showerheads, Aerators, CFLs	Franchise Wide	3,300	\$87.13	\$96.22
Weatherization	Insulation & Draftproofing	Ottawa area, GTA, Niagara Region	381	\$2,708	\$2,740
<u>2010</u>					
Enhanced TAPS	Showerheads, Aerators, CFLs	Franchise Wide	2,700 (18% decrease over 2009)	\$88.92	\$92.29
Weatherization	Insulation & Draftproofing	Ottawa area, GTA, Niagara Region	450 (18% increase over 2009)	\$2,284	\$2,839.55
Solar Thermal	Solar Thermal Water Heaters	Franchise Wide	200 (social housing only)	Approx \$7,000	\$7,000
<sup>1</sup> Most Enbridge Low Income programs are not delineated by social or non-social housing.					

Reference for 2010 programs is EB-2009-0154, Phase II, Exhibit D, Tab 2, Schedule 1, Pages 1 to 3.  
Reference for 2009 programs is EB-2006-0021, Exhibit A, Tab 7, Schedule 1, page 15, 18 to 21 of 57

Witnesses: M. Brophy  
P. Squires

LIEN INTERROGATORY #2

INTERROGATORY

Ref.: Exhibit D, Tab 1, Schedule 1, Pages 1-5

a) Assuming budget increases of 25%, 50% and 100%, from your proposed 2010 low-income DSM plan are drawn from reallocating funds approved from your residential DSM budget for 2010, please prepare a table which shows the results from question 1 above and the impacts of each budget scenario in terms of:

- i. The type of measures
- ii. The number of communities, which communities they are, and the percentage increase in the number of communities over 2009 and over the proposed 2010 increase.
- iii. The number of program participants, type of participants (broken down social housing and non-housing) and the percentage increase in the number of program participants over 2009 and over the proposed 2010 increase.
- iv. The retrofit cost per participant
- v. The total program cost per participant.

b) Please discuss the implications of these budget increases, including on your non-low-income DSM plan, and how you would achieve each of these scenarios.

c) How would the company achieve each of these scenarios if the budget increase was incremental to your non-low-income DSM plan budget?

RESPONSE

- a) Enbridge Gas Distribution ("Enbridge") has not prepared detailed plans based on various budget scenarios. Directionally, though, increasing the low income budget in 2010 would allow Enbridge to expand the program into other areas of the franchise (such as Barrie) and permit the inclusion of additional, deep energy efficiency measures that fit within the current TRC-based framework.

Witnesses: M. Brophy  
P. Squires

b) Please see chart below.

<u>Low Income Budget % Increase</u>	<u>Increased Low Income Budget</u>	<u>Amount Drawn from Reallocation of Funds</u>
25%	\$3,833,725	\$ 766,745
50%	\$4,600,470	\$1,533,490
100%	\$6,133,960	\$3,066,980

The above scenarios would likely require the cancellation of at least one residential DSM program, and a reduction of the number of participants in other programs. This would likely reduce the total number of residential ratepayers that would be able to take advantage of DSM programs.

c) Please refer to Part (a) above.

Witnesses: M. Brophy  
P. Squires

LIEN INTERROGATORY #3

INTERROGATORY

Ref.: Exhibit D, Tab 1, Schedule 1, Page 2

What partnerships did the company develop in 2009 as part of the low-income programs? How will partnerships be expanded in 2010?

RESPONSE

Enbridge Gas Distribution ("Enbridge") continues to build relationships amongst low income market stakeholders and interested parties. Newly developed relationships in the 2009 low-income programs include Green Venture, a Green Communities Canada member, Kiwanis Seniors Group, a host of social service agencies through the relationship with Social Providers Network of Ontario, Globe, contractors for the delivery of Enhanced TAPS and product suppliers. In 2010, Enbridge expects to continue to enhance these relationships and build new ones with parties that service or support the low income market.

Witnesses: M. Brophy  
P. Squires

LIEN INTERROGATORY #4

INTERROGATORY

Ref.: Exhibit D, Tab 1, Schedule 1, Page 4

Please describe in detail the research plan for the low-income DSM programs for 2010.

RESPONSE

In 2009, through a data mining initiative, the Enbridge Gas Distribution franchise area low income street level communities were identified to provide better targeting of marketing and delivery efforts. The low-income budget framework does not propose significant investment in additional research in 2010 beyond on-going monitoring of program results and opportunities.

Witnesses: M. Brophy  
P. Squires

LIEN INTERROGATORY #5

INTERROGATORY

Ref.: Exhibit D, Tab 1, Schedule 1, Page 1

Please describe in detail the evaluation that will be conducted on the 2010 low-income DSM programs and how this differs, if at all, from the evaluation conducted on the non-low-income DSM programs for 2009.

RESPONSE

Program evaluation for Enbridge Gas Distribution's ("Enbridge") 2010 low-income DSM programs will include the same evaluation components as in 2009. Once approved, the Low Income programs become part of the overall DSM portfolio for 2010 and will be treated as such.

Evaluation components for 2009 and 2010 are described below:

Weatherization

- Review year end work summary by service providers to ensure savings and cost measures are reflective of the current Board approved assumptions.
- Evaluate service provider performance throughout the year according to contractual obligations

TAPS

- Complete third party surveys to verify installations, determine satisfaction and evaluate service provider performance according to contractual obligations
- Quarterly participant tracking based on contractor reports

These programs are included in the DSM Annual Report and may be reviewed by our external auditor.

Witnesses: M. Brophy  
P. Squires

LIEN INTERROGATORY #6

INTERROGATORY

Ref.: Exhibit D, Tab 1, Schedule 1, Page 3-5

- a) If the Solar Thermal Water Heating Program is successful, what other renewable initiatives will Enbridge consider offering in the future to the low-income sector?
- b) Please provide the total costs for the Solar Thermal Water Heating Program broken down according to sources of funds.

RESPONSE

- a) Enbridge Gas Distribution ("Enbridge") has not identified any other renewable initiatives that it is considering offering to the low-income sector at this time, however, Enbridge is supportive of the principle of ensuring low-income consumers have similar access to renewable energy technologies as higher income consumers, and therefore is prepared to consider other renewable energy opportunities with available budget and willing, suitable partners.
- b) The Solar Thermal Water Heating Program proposed budget of \$1.4 million would be funded entirely by Enbridge residential ratepayers. This amount is net of the ecoENERGY for Renewable Heat program rebates that Enbridge has access to until December 2010.

In the event that Enbridge is also able to secure direct program funding (i.e. rebates directed to the utility instead of the consumer) from the federal ecoENERGY Retrofit – Homes program and the provincial Home Energy Savings program, the \$1.4 million budget requirement would be supplemented by approximately \$0.5 million. Any direct rebate funds will be returned to Ratepayers through the existing Demand Side Management Variance Account ("DSMVA").

Witnesses: M. Brophy  
P. Squires

VECC INTERROGATORY #1

INTERROGATORY

Reference: Exhibit D Tab 1 Schedule 1 Page 2 of 6

Preamble:

"Enbridge has assessed the Board's direction in relation to low-income DSM for 2010 and has endeavored to provide a balanced portfolio that aligns with customer needs and the changing environment. For this submission the term "status quo" is used to describe what elements would have been proposed for 2010 under the previous budget formula (prior to the approval of the Industrial Sector Support Pilot Program). The status quo low-income plan presented here allocates \$1,526,980 or 20% of the residential DSM budget to low-income programs and 14% of the Market Transformation ("MT") budget, \$140,000, to low-income MT initiatives."

- a) Provide a version of Table 1 that shows the detailed calculation (including % metrics) supporting the 2010 LI ("status quo") base budget compared to the Board- approved 2009 Budget
- b) Provide the calculations incorporating the enhancements related to the Industrial Pilot Program and SHSC Solar Water Heating Program
- c) Compare the budget metrics to those filed by Union Gas for its 2010 LI program.
- d) If the Government Low Income Policy Direction is received prior to or during the 2010 rate year, will EGDl file a revised budget/ program based on its original plan.
- e) If so provide an estimate of the cost and program elements assuming 6 months of implementation

RESPONSE

- a) Please see table on the following page. Details can be found in EB-2006-0021, Exhibit A, Tab 7, Schedule 1, Pages 19-21.

Witnesses: M. Brophy  
P. Squires



Item No.	Program Name	2009				2010			
		Participants 2009	Net Effective m3 2009	Total O&M 2009	Share of Res. DSM Budget <sup>1</sup>	Participants 2010	Net Effective m3 2010	Total O&M 2010	Share of Res. DSM Budget <sup>1</sup>
1	Weatherization	381	503,301	\$1,044,005		450	510,300	\$1,277,800	
2	Enhanced TAPS	3300	417,039	\$ 317,520		2700	383,718	\$ 249,180	
	Total			\$1,361,525	21%			\$1,526,980	20%
3	Market Transformation			\$ 170,000				\$ 140,000	
4	Total Status Quo Low-Income	3981	1,387,268	\$1,531,525	18%	3150	894,018	\$1,666,980	14%
5	Industrial Pilot	0	0	\$0	n/a	n/a	n/a	\$1,250,000	n/a
6	Solar Thermal Water Heating	0	0	\$0	0%	200	n/a	\$1,400,000	18%

<sup>1</sup> Residential DSM Budget for 2010 is \$7,615,574 (Ref: EB-2009-0154, Exhibit B, Tab 1, Schedule 2, Page 1).

- b) See rows 5 and 6 in the table above.
- c) Union Gas's Low Income DSM budget for 2010 is \$1.730 million. This budget is not broken down by program in Union Gas' evidence, nor is the overall residential sector budget provided, so Enbridge is unable to calculate the % metric.  
(Ref: Union Gas Low Income DSM Plan Evidence, EB-2009-0166, Exhibit A).
- d) Enbridge Gas Distribution ("Enbridge") will respond to direction from the Ontario Energy Board if the Government's Low Income Policy direction is received during the 2010 rate year. The EB-2009-0154 Low Income programs, if approved prior to the end of 2009, will enable Enbridge to ramp up and deliver results for Low Income customers. The ability to ramp up to deliver supplementary programs in 2010 will be heavily impacted by the timing and process of when additional direction occurs.
- e) Without knowing the details of the Government's Low Income plan, Enbridge is not in a position to estimate costs and program elements.

Witnesses: M. Brophy  
P. Squires

VECC INTERROGATORY #2

INTERROGATORY

Reference Exhibit D Tab 1 Schedule 1 Page 3/4 of 6

Preamble:

In addition to the \$1,666,980 status quo low-income programs, Enbridge is proposing an incremental \$1.4 million for its low-income DSM budget to take advantage of a time-sensitive opportunity in the market to install 200 solar thermal water heaters in social housing units at a reduced cost. This will bring the total low-income DSM budget proposed for 2010 to \$3,066,980. Secondly, solar thermal installations in 2010 will also qualify for the Federal Government's ecoENERGY Retrofit – Homes program rebate and the Provincial Government's Home Energy Savings program rebates, which amount to an additional \$2,500 off the installed cost of solar thermal water heating units.

- a) Why would EGDI not budget the SHSC Solar Water Heater Program on a net basis rather than on a gross basis?
- b) If the rebates are received what is the rationale for including the amounts in the DSMVA?
- c) Will the usual TRC/target criteria for using funds in the DSMVA? If not discuss EGDI's proposals.
- d) What will the rebate money be used for:
  - i. Cost overruns
  - ii. More Solar Water Heaters
  - iii. Other Low Income programs
  - iv. General DSM program expenditures

Please provide details of EGDI's Proposal(s).

RESPONSE

- a) Enbridge Gas Distribution ("Enbridge") has budgeted the Solar Water Heating Program on a gross basis because at this time we do not have executed agreements with the Federal or the Provincial government to re-direct program rebates the utility. Although Enbridge has been given verbal indication that this is possible, it is expected that putting such agreements in place will be time-consuming, and therefore Enbridge took the more realistic path of requesting the higher budget amount.

Witnesses: M. Brophy  
P. Squires

- b) If the rebates are received after Ontario Energy Board (the “Board”) approval of rates for 2010, the Demand Side Management Variance Account (“DSMVA”) can be used to “refund” any excess funding to ratepayers after year-end, which is consistent with any other unspent DSM budget dollars that might exist.
- c) The DSMVA is used for two purposes: a) to record program expenditures in excess of approved budget (i.e. a debit to ratepayers), and/or b) to record unspent budget amounts (i.e. a credit to ratepayers). In the former case, the current DSM framework has certain criteria and rules related to accessing additional funding. In the latter case – that of recording unspent budget amounts for refund back to ratepayers – no such criteria or rules apply.
- d) It is expected that the rebate money will be applied to the Low Income Solar program and that any excess is refunded back to ratepayers.

VECC INTERROGATORY #3

INTERROGATORY

Reference: Exhibit D Tab 2 Schedule 1 Page 4 LI Weatherization Program

- a) Provide full details of the assumptions underpinning calculation of natural gas (1134.0 m3) and electricity (165 kWh) savings and costs:
  - i. Measures and individual savings
  - ii. Weighted average savings
  - iii. Break down of costs
  - iv. Sources of assumptions
- b) Provide details of the calculation of average savings and costs. (Page 4)
- c) Compare the assumptions, Savings and costs to those estimated by OPA and electricity distributors.
- d) Comment whether Union and EGDI are using common assumptions. If not highlight the main differences.

RESPONSE

- a) The assumptions for the LI Weatherization Program are based on the 2010 low-income input assumptions in the Navigant report "Measures and Assumptions for DSM Planning" dated April 16, 2009. All participants in consultation process EB-2008-0346 received a letter from the Board on April 29, 2009 directing natural gas distributors to utilize the "Measures and Input Assumptions" for DSM Plans for 2010. The report references Greensaver's "Low Income Weatherization Research Summary" prepared for Enbridge Gas, December 2007, as its source. Enbridge Gas Distribution ("Enbridge") has followed Ontario Energy Board's (the "Board") direction on this matter and used the Navigant assumptions for this program in its 2010 Low Income DSM Plan.

Through recent analysis of a larger sample of weatherization participant results (2007 and 2008), however, it has become clear that the Navigant assumptions understate the average savings resulting from this program. Based on a simple

Witnesses: M. Brophy  
P. Squires

average of two years of program results, annual savings and incremental costs are now:

- 1,229 m<sup>3</sup>
- 255 kWh
- \$ 2667 incremental cost

This updated information points to improved cost-effectiveness of this program.

- b) For details of the calculation of average savings and costs please refer to source indicated in response to (a) above.
- c) Enbridge's low-income Weatherization Program is a natural gas energy efficiency program and therefore the assumptions, savings and costs are not comparable to weatherization measures in electrically heated homes.
- d) Enbridge and Union Gas are using common assumptions derived from the Navigant report "Measures and Assumptions for DSM Planning" dated April 16, 2009.

Witnesses: M. Brophy  
P. Squires

VECC INTERROGATORY #4

INTERROGATORY

Reference Exhibit D Tab 2 Schedule 1 Page 4 Market Transformation Program

- a) Provide detailed description of screening/eligibility for participants.
- b) Describe how this initiative relates to Enhanced TAPS.
- c) Describe how this initiative relates to the SHSC programs in terms of target audience and participants.
- d) Why wouldn't implementation of the Scorecard include a survey of the target group(s) before and after, including conservation knowledge and willingness to act? Please explain how verification will be achieved otherwise.

RESPONSE

- a) The Low Income Market Transformation Program does not have a formal screening/eligibility process for participants. However, the program utilizes channels and partner programs that focus on the Low Income market to deliver energy efficiency education targeted to these consumers. These channels could include food banks, social service agencies, social housing initiatives, seniors' organizations and other programs geared to lower income groups.
- b) Enhanced TAPS is delivered separately from the Market Transformation Program. The Market Transformation program has been utilized to increase other LI program awareness and generate applications.
- c) The Low Income Market Transformation program is discrete from any Social Housing Services Corporation ("SHSC") programs; however, Enbridge Gas Distribution ("Enbridge") will consider partnering with SHSC or any other delivery agent that is carrying out similar work. Enbridge will discuss with SHSC to investigate the potential for doing so.

Witnesses: M. Brophy  
P. Squires

- d) The table at the bottom of Exhibit D, Tab 2, Schedule 1, page 4 is not a scorecard, rather it is a summary of program elements and assumptions, as shown on all other program summaries in Exhibit D, Tab 2, Schedule 1. Enbridge has not prepared a formal scorecard for this and other market transformation initiatives in the past that have relatively small budgets and are not eligible for a shareholder incentive.

In this case, carrying out before and after surveys would be quite costly relative to the size of the budget, and likely of limited value with an audience of mixed cultural and language background and possibly limited literacy skills. Survey validation is inherently difficult in education-based programs, but in this case Enbridge trusts the expressed need of the partner organizations (e.g. food banks, social agencies, etc.) as verification that the education and training services are valuable and useful to their Low Income clients.