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VIA RESS, EMAIL AND COURIER

August 19, 2010

Ms. Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street, 27th Floor Toronto, Ontario M4P 1E4

Dear Ms. Walli:

Re: Enbridge Gas Distribution Inc. ("Enbridge")

Board No: EB-2010-0175 - 2011 DSM Plan - Interrogatory Responses

In accordance with the Ontario Energy Board's (the "Board") Procedural Order No. 1, dated July 19, 2010, enclosed please find the interrogatory responses of Enbridge.

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, as of August 23, 2010.

If you have any questions, please contact the undersigned.

Sincerely.

Lesley Austin

Regulatory Coordinator

cc: Dennis O'Leary, Aird & Berlis (via email) Interested Parties (EB-2010-0175)

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 1 Schedule 1 Page 1 of 1 Plus Attachment

BOARD STAFF INTERROGATORY #1

INTERROGATORY

Ref: Exhibit B / Tab 2 / Schedule 2 / Page 5 & 6

Please explain any difference between the ENERGY STAR™ for New Homes V#3 and ENERGY STAR™ for New Homes V#4 residential market programs.

RESPONSE

At this time, Enbridge Gas Distribution Inc. does not plan to deliver an Energy Star for New Homes Version #4 program as part of its 2011 DSM portfolio.

The key differences between Energy Star for New Homes Version #3 and Version #4 are outlined in the attached document from EnerQuality Corporation.

Witnesses: A. Mandyam



Summary of changes: EnerQuality's ENERGY STAR® for New Homes technical specifications V3 to V4



Element	Version 3.0	Version 4.0		
Eligibility	Part 9 OBC: Detached, attached, stacked, factory-built	Part 9 OBC: Detached, attached, factory-built Custom BOP/Performance Path only: electrically-heated, walk-out basements, slab-on-grade		
Climate Zones	South ≤5000 DDC North >5000 DDC	Based on HOT2000 climate zones. Toronto, Simcoe, London, and Windsor form one region; Ottawa, Muskoka, and Kingston form another region Reserved: 'North' climate zones		
Windows, Sliding Glass Doors and Skylights	ENERGY STAR qualified, Zone B	ENERGY STAR qualified according to climate zone (Zone B for climate zones listed above)		
Window Area	Window trade-off packages for increased window area, increasing from 13% to 16% area or increasing to unlimited	Window area limited to 13% area, with trade-off packages for up to 16% area		
Exterior Doors	Insulated slab door	ENERGY STAR qualified door (1 door exemption); cellar door: insulated core door		
Heated Ceiling w/ attic	R40	Detached: Toronto, Simcoe, London, Windsor: R40 Detached: Ottawa, Muskoka, Kingston: R50 Attached: R40		
Heated Ceiling w/o attic	R31, both north and south climate zones	Unchanged, R31 climate zones listed above		
Exterior Walls	R19+5 south, R19 + 7.5 north	Unchanged, R19+5 climate zones listed above		
Exposed Floors	Unchanged, R31			
Basement Walls	Unchanged, R12 full height			
Slab w/o in-floor heating < 4 ft below grade:	un-insulated slab, R+10 frost wall	Must comply under performance path or custom BOP		
Slab w/ in-floor heating	R+10, full slab	Must comply under performance path or custom BOP		
House Air Leakage	Unchanged, detached NLR of 0.2, attached NLR of 0.286			
Ventilation	HRV w/ 60% sensible eff. in detached homes. Attached homes may maintain exhaust fans w/o heat recovery. Fanless HRV's are no longer eligible for inclusion.	Unchanged, HRV w/ 60% sensible eff. in detached hom no HRV required in attached. Reserved: fanless HRV's		
Space Heating & Cooling	Right sizing of the equipment is a requirement for both heating and AC. Electrical space heating has special requirements.	ENERGY STAR qualified, OR condensing hot water heaters (combo) system. Ottawa, Kingston, Muskoka: Min. 92% AFUE Reserved: Electrical space heating AC: SEER 14.5 N. Gas/Propane Fireplace: spark ignition (no pilot light)		
Ducts	Unchanged			
Water heating	Canada's Energy Efficiency Regulations (CEER)	Gas: ENERGY STAR qualified (0.62 EF) Electric resistance water heaters: unchanged (0.92 EF)		
Electrical Savings Credits	Requirements for electrical savings based on house size (4 ranges).	Revised electrical savings table based on NRCan documentation. Min. requirement of 400 kWh credits for detached, 245 kWh for attached, regardless of floor area.		
ENERGY STAR Qualified Products	Heating equipment and windows must be ENERGY STAR qualified, other appliances and cooling equipment not required to be ENERGY STAR qualified unless the product is utilized for electrical savings credit.	When ENERGY STAR technical specifications exist in Canada for any given product that is sold with the home, the product must be ENERGY STAR qualified		
Alternate Building Packages (ABPs)	emoved several trade-offs. Re-insertion of trade-offs subject to approval by NRCan.			

Sections marked under "Reserved" will be provided as addenda at a later date.

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 1 Schedule 2 Page 1 of 1

BOARD STAFF INTERROGATORY #2

INTERROGATORY

Ref: Enbridge Gas Distribution Inc. 2011 DSM Plan dated May 28, 2010

Enbridge Gas Distribution Inc. ("Enbridge") is seeking approval for its 2011 Demand Side Management ("DSM") plan.

(a) Please identify any deviations in Enbridge's 2011 DSM plan from the framework and budget escalators established for the 2007-2009 three-year DSM plan approved in DSM Generic decision EB-2006-0021.

If Enbridge has deviated from the approved framework decision, please comment on the specific nature of the deviations and provide the rationale for the decision to do so.

RESPONSE

As described in the Company's evidence at Exhibit B, Tab 1, Schedule 2, the DSM Plan for 2011 follows the framework established in EB-2006-0021 in almost every respect, including the escalation of 5% of the 2010 budget, including Low Income, in accordance with the EB-2006-0021 formula.

Without changing the overall DSM budget formula as approved in EB-2006-0021, there are two areas that depart from the established framework to respond to evolving program and market issues unforeseen at the time the original 3-year plan framework was designed and approved:

- 1) a shift in budget from resource acquisition programs to market transformation/scorecard programs; and
- 2) a shift in potential SSM incentive from the TRC-based SSM to the Market Transformation/Scorecard SSM, and the resulting re-casting of the SSM curve. The maximum SSM allowable is developed in accordance with the EB-2006-0021 formulas.

These changes were developed in consultation with the members of the DSM Consultative. Details of these changes are provided in the Company's evidence at Exhibit B, Tab 1, Schedule 2.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 1 Schedule 3 Page 1 of 1

BOARD STAFF INTERROGATORY #3

INTERROGATORY

Ref: Letter to the Board from the Minister of Energy and Infrastructure dated July 5, 2010, regarding Low-Income Energy Customers

Given the recent letter to the Board dated July 5, 2010, from the Minister of Energy and Infrastructure regarding low-income energy customers, does Enbridge intend to make any changes to its low-income programs, in terms of the total budget and types of programs it intends to undertake in 2011?

RESPONSE

Enbridge is looking for a Board sponsored process to file a supplemental document outlining its final plan for the 2011 low income programs.

Enbridge and Union have initiated a consultative process to discuss the Minister of Energy and Infrastructure's directive on Low Income Programs with LIEN, VECC, OPA and other stakeholders. Enbridge and Union intend to develop a separate filing on its Low Income Programs which will augment the current Low Income filing of budget, target and appropriate shareholder incentives. We expect these consultations to be completed by the end of September, 2010 and look to file a Low Income Program plan soon after the consultation with Low Income stakeholders.

Enbridge requests that the Board provide its decision with respect to our 2011 DSM Plan filing without waiting for this separate Low Income Program Plan filing so as to allow the Company to complete its required 2011 DSM Plan's preparatory activities prior to commencing its 2011 DSM plan in January, 2011.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 2 Schedule 1 Page 1 of 2

IGUA INTERROGATORY #1

INTERROGATORY

Reference: Ex. B/T1/S3: 2011 Budget.

Enbridge Gas Distribution (EGD) filed its 2011 Demand Side Management Plan application on May 28, 2010. The referenced exhibit indicates a total 2011 DSM Budget of \$26,708,068, which is an increase over EGD's 2010 approved DSM budget (\$23.8 million) of 12.2%.

In its EBO-2006-0021 (Phase I) Decision with Reasons the Board accepted the settlement agreement of the parties in that proceeding which set EGD's annual DSM budget escalator at 5.0%.

On May 18, 2010 the OEB issued a Decision in EGD's 2010 rates application (EB-2009-0172), which Decision included a determination that EGD's DSM Industrial Pilot Program funding of \$1.25 million "will not be incremental to Enbridge's DSM \$23.8 million budget for 2010" (Decision page 9).

- (a) Does EGD's 2011 DSM budget as filed include amounts added to EGD's 2010 DSM budget, as escalated to 2011, and related to the DSM Industrial Pilot Program? If so, please:
 - (i) Confirm that, in light of the Board's May 18, 2010 Decision in EB-2009-0172, EGD will update its 2011 DSM budget to remove the costs of the Industrial Pilot Program, plus any escalation of those costs from the 2010 proposed to the 2011 proposed budget.
 - (ii) File an update of Ex. B/T1/S3 indicating EGD's revised 2011 DSM budget proposal.
- (b) Please explain any drivers, other than the previous inclusion in EGD's proposed 2010 DSM budget of \$1.25 million on account of the Industrial Pilot Program, for the increase in the proposed 2011 DSM Plan budget beyond the 5.0% escalation factor prescribed in the current DSM Framework. Please indicate the basis upon which EGD is proposing a 2011 DSM Budget that exceeds a 2011 budget determined by the prescribed budget escalation factor.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 2 Schedule 1 Page 2 of 2

RESPONSE

- a) The 2011 DSM Budget does not include any amounts related to the Industrial Program Pilot proposed originally for 2010 and no update is required.
- b) Please refer to EB-2009-0154 2010 DSM Plan, at Exhibit B, Tab 1, Schedule 1, page 2, and Exhibit B, Tab 1, Schedule 2, page 1, Table 1 "Summary of 2010 Budget". Line 20 for \$23,800,770 Total budget excludes \$1,250,000 for Supplemental Pilot Program (Industrial Sector Support Programs).

Enbridge did not deviate from the prescribed budget escalator as established in EB-2006-0021. On May 13, 2009, the Board directed all rate-regulated natural gas distributors to remove the budget allocated for Low Income DSM from the base 2009 budget, prior to applying the 5% approved budget escalator, to determine the 2010 budget. The Enbridge 2010 DSM Plan with a \$23.8 million budget was filed and approved on this basis.

Subsequently, EB-2009-0154 Phase 2 - DSM Low Income Plan, was filed and approved for \$1.67 million. This resulted in a combined 2010 DSM budget of \$25.47 million.

The Board letter of January 7, 2010 to the rate-regulated natural gas distributors required the 2011 DSM Plan to be filed inclusive of low income programs. Accordingly, the combined 2010 budget of \$25.47 million was used as the base value to apply the 5% escalator thus the budget as shown 2011 DSM Plan as filed.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 2 Schedule 2 Page 1 of 1

IGUA INTERROGATORY #2

INTERROGATORY

Reference: Ex. B/T3/S4: Custom Resource Acquisition Technologies.

Please confirm that EGD will be amending its 2011 DSM Plan application to reflect a steam trap measure life assumption of 6 years rather than 13 years, as it did in respect of its 2010 Assumption Update Application.

<u>RESPONSE</u>

Enbridge has amended the 2011 DSM Plan Application to reflect the steam trap measure life assumption of 6 years. The update to Exhibit B, Tab 3, Schedule 4 was filed on June 25th, 2010.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 2 Schedule 3 Page 1 of 1

IGUA INTERROGATORY #3

INTERROGATORY

Reference: Ex. B/T2/S2, page 5 and Ex. B/T3/S2, page 1, line 14: Energy Star for New Homes V#3 Program.

EGD's 2009 DSM Audit raised questions regarding the free ridership assumption for the Energy Star for New Homes V#3 program. Please indicate whether EGD has made any changes to this assumption for 2011 as a result, and if so please file revised evidence as appropriate.

<u>RESPONSE</u>

Through the 2009 Audit process, Enbridge has agreed to a revised free ridership of 48% for Energy Star for New Homes Version #3 for the 2009 LRAM and the 2010 TRC results.

Currently, Enbridge is evaluating whether this program will continue in 2011, and if so, what the most appropriate free ridership rate should be for that year. This issue, and others, are currently under discussion by Enbridge's Evaluation and Audit committee, and Enbridge plans to file an update on this program and any others that may require updated assumptions in the fall.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 3 Schedule 1 Page 1 of 1

LIEN INTERROGATORY #1

INTERROGATORY

1. Ref: Exhibit B, Tabs 1 and 2

In light of the Minister's request of the Board (July 6th letter) to consider 'expanding both low-income and general natural gas DSM', and the Board letter of July 22, 2010, which states that 'any implications of the Minister's letter will be considered through the hearing process on those plans', referring to the Enbridge 2011 DSM plan:

- a. How does Enbridge intend to expand its efforts budget, increased participants, increased gas savings for general (non low-income) natural gas DSM from the original filed 2011 DSM Plan?
- b. How does Enbridge intend to expand its efforts budget, increased participants, increased savings for low-income DSM from the original filed 2011 DSM Plan?
- c. For Enbridge's deep measure low-income program (Low Income Weatherization Program) how much will Enbridge increase the average expenditure/customer to ensure that deeper measures are implemented? How many additional customers will Enbridge be able to accommodate in 2011? To what extent will Enbridge be able to increase the geographical coverage of the program for 2011?

<u>RESPONSE</u>

- a) Enbridge is not proposing to expand its non-low income DSM efforts in the 2011 plan, which is the basis of this proceeding. Enbridge continues to plan for an expanded framework in 2012, and is in regular consultation with Intervenors, the OPA and other stakeholders to identify program and market opportunities to develop for 2012 and beyond. Should a DSM opportunity arise before or during 2011 that Enbridge would like to move immediately on, that would require resources beyond the existing framework budget, Enbridge will bring a proposal forward to the Board for consideration.
- b) and c) Please see the response to Board Staff Interrogatory #3, at Exhibit I, Tab 1, Schedule 3.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 3 Schedule 2 Page 1 of 1

LIEN INTERROGATORY #2

INTERROGATORY

2. Ref: Exhibit B, Tabs 1 and 2

Given the Minister's letter to the Board referred to above, a major shift in the approach to both low-income and non low-income DSM may be needed to achieve greater savings for more low-income customers. Because of the timing of this proceeding and the Minister's letter, LIEN recognizes that 2011 is a transition year. What additional research is needed by Enbridge as part of the 2011 DSM Plan to ensure that the major shift in approach will begin to take place in 2012 for low-income and non low-income natural gas DSM?

<u>RESPONSE</u>

Due to the overall amount of the DSM budget and the anticipated challenge to reach the TRC target in 2011, Enbridge expects that it will be difficult to fund much formal research. The priority will be to identify additional measures that meet all framework criteria, to help grow the portfolio in 2012. Consultation with industry experts will continue, to ensure we have a complete understanding of potential measures and market capacity for program delivery.

In the low-income arena, Enbridge plans to continue on-going consultation with low-income stakeholders (including VECC, LIEN, OPA, electric LDC's, social housing providers, and others) over the balance of 2010 and through 2011 to identify program opportunities and learn from their collective experience. Enbridge also monitors Low-Income programs in the United States and other jurisdictions to optimize program outcomes.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 1 Page 1 of 1

VECC INTERROGATORY #1

INTERROGATORY

Reference: Exhibit B/Tab 1/Schedule 2/Page 4 para 10

Preamble: "The proposed increase in Low Income Weatherization budget will enable Enbridge to increase its participant target for this program from 389 in 2010 to 425 in 2011."

- a) Does EGDI agree that as a result of the Ministers Letter that the Low income components of the 2011 DSM Plan need revision?
- b) What process will EGDI use to revise the Low Income components of the 2011 plan and what are the expected milestones and timing.
- c) Will this result in a revised/updated Application? Please discuss.
- d) How does the answer to part c) fit with the timing and approvals requested in the current application?

<u>RESPONSE</u>

- a, b, and c) Please see the response to Board Staff Interrogatory #3, at Exhibit I, Tab 1, Schedule 3.
- d) Timely approval of the overall 2011 DSM Plan will be important to ensure programs are launched on time and with a sufficient ramp-up period to maximize results in 2011. Therefore, Enbridge proposes that the Board continue on its current procedural timeline for EB-2010-0175 and release its decision on the Plan as soon as possible.

When a low-income DSM plan is filed in the fall, the Board may consider that application and make a subsequent decision on only those elements of the Plan that are affected by the filing.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 2 Page 1 of 3

VECC INTERROGATORY #2

INTERROGATORY

References: Exhibit B/Tab 2/Schedule 2/; Exhibit B/Tab 2/Schedule 8/Page 3

- a) For Enhanced TAPS provide a discussion of achievable/feasible revised targets assuming no budget constraints.
- b) For Enhanced TAPS Provide the following, assuming a 50% increase in participation target:
 - i. 2011 targets
 - ii. Budgets
 - iii. Communities served
 - iv. TRC
 - v. SSM
- c) For the Low income Weatherization Program provide a discussion of achievable/feasible revised targets for 2011 assuming no budget constraints
- d) For Low Income Weatherization provide the following, assuming a 50% increase in participation target:
 - i. 2011 targets
 - ii. Budgets
 - iii. Communities served
 - iv. Incentive
- e) For Low income Education provide a discussion of achievable/feasible revised enhancement assuming no budget constraints.

<u>RESPONSE</u>

a) Assuming no budget constraints for Enhanced TAPS, Enbridge estimates the achievable potential in 2011 would be 4000 homes. The key barrier limiting achievement of this potential is the difficulty identifying and reaching this market segment.

Another consideration is that this program currently resides within the traditional TRC-based program portfolio (not the scorecard framework, where the weatherization program resides), and therefore it has to compete for budget dollars with other TRC-based programs which may be more highly cost-effective per budget dollar. Enbridge is currently incented to maximize TRC through the SSM and

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 2 Page 2 of 3

therefore these other, higher-TRC programs may be more financially rewarding to promote.

b) The current target of Enhanced TAPS in 2011 is 1,000 participants. If we were to increase the participation target by 50%, we estimate the following impacts:

2011 target plus 50%	Budget	Communities Served	TRC
1500 homes	\$138,365	EGD franchise area	\$607,986

If an assumed TRC target of \$200,000,000 is reached, and the 50% additional participation resulted in \$202,662 over target TRC, the associated SSM would be approximately \$16,000.

c) Assuming no budget constraints, Enbridge could expand the reach of the program to two new communities; Peterborough and Collingwood. This would translate to a total achievable potential in 2011 of 500 homes. The challenges experienced in delivering this program include reaching this segment due to lack of awareness, and aversion of low-income consumers to self-identify for participation.

With the advent of electric CDM and a province-wide low-income program for electricity measures in 2011, we expect the service provider market capacity for low-income program delivery to be strained, and this will limit the extent to which the gas program can grow in 2011.

d) The current target for the weatherization program is 425 homes. If we were to increase the target by 50%, we estimate the following impacts:

2011 target plus 50%	Budget	Communities Served	Incentive
638	\$2,233,000	GTA Durham	Unable to calculate
(Note that this figure exceeds what we expect is the maximum achievable potential in 2011 for the reasons identified in part c above. This is a theoretical value only.)		York Peel Ottawa Niagara Consider expanding to Peterborough and Collingwood	(Note that this program is currently incented through a custom-designed scorecard framework which is not scalable beyond achievement of 450 participants in its current design)

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 2 Page 3 of 3

e) The current 2011 budget for the Low Income education program is \$140,000. Assuming no budget constraints, Enbridge would seek advice from stakeholders on additional activities that could be carried out. We could deliver more workshops and sponsor additional community champions to promote awareness of energy efficiency programs within the local communities. Also, we could sponsor a special employment program to hire youth and adults from the local low income community to deliver some of the basic and deep Low Income measures.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 3 Page 1 of 2

VECC INTERROGATORY #3

INTERROGATORY

References: i) Exhibit B/Tab 2/Schedule 2/Page 3:

- ii) Exhibit B/Tab 3/Schedule 2/Page 1 items 9-12
- iii) Exhibit B/Tab 3/Schedule 3/Page 18
- a) Provide a Schedule that shows the TRC screening calculations for the Fireplace Efficiency Program for existing/new homes
- b) Provide details of the Budgets, incentives, targets for 2011
- c) Provide comparative technical data on the current and high efficiency fireplaces.
- d) Provide comparative calculations of annual fuel and \$ savings for standard and high efficiency fireplaces

RESPONSE

a) The table below provides a breakdown of the 2011 filed assumptions for the Fireplace program which were used as inputs into the current TRC calculator and resulted in the following TRC per participant. Please note that incentive and fixed program costs are not included in this TRC calculation.

Fireplace TRC

New Construction/Existing	Gas Savings M3	Electric Savings kWh	Free Ridership %	Measure Life Yrs	Incremental Cost \$	TRC per Participant \$
Pilotless Minimum 70% EnerGuide Rating Pilotless Minimum 60% EnerGuide Rating	110 109	-31 -31	17 17	20 20	135 135	175.87 173.03
Pilotless Minimum 70% EnerGuide Rating Zero Clearance - 40kBtu.h	108	-31	17	20	135	170.19
Pilotless Minimum 60% EnerGuide Rating Zero Clearance - 40kBtu.h	122	-31	17	20	135	209.98

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 3 Page 2 of 2

- b) The delivery details of the fireplace efficiency program are currently under development. Enbridge has not established detailed budgets, incentives, targets for this program at this time.
- c) Details of technical specification data for both the base and efficient equipment can be found in the Company's evidence at, Exhibit B, Tab 3, Schedule 3, pages 11 to 13.

The assumptions for this program were submitted and Board approved in the 2010 Update (EB-2009-0154). Extensive consultation on this measure was completed by both Enbridge and Union's EAC.

d) Details of annual fuel savings for both the base and efficient equipment can be found in the Company's evidence at, Exhibit B, Tab 3, Schedule 3, page 11 to 13.

The assumptions for this program were submitted and Board approved in the 2010 Update (EB-2009-0154). Extensive consultation on this measure was completed by both Enbridge and Union's EAC.

Using Enbridge's July 1, 2010 rates for a Rate 1 customer, the annual savings in gas supply (17.2987c/m³) and delivery charges (assuming 8.3840 c/m³, first block charge) would be:

Pilotless Minimum 70% EnerGuide Rating	\$28.25 *
Pilotless Minimum 60% EnerGuide Rating	\$27.99
Pilotless Minimum 70% EnerGuide Rating Zero Clearance - 40kBtu.h	\$27.74
Pilotless Minimum 60% EnerGuide Rating Zero Clearance - 40kBtu.h	\$31.33

^{* (110} x .172987) + (110 x.083840)

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 4

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VECC INTERROGATORY #4

INTERROGATORY

Reference: i) Exhibit B/Tab 2/Schedule 2/Page 6

- ii) Exhibit B/Tab 3/Schedule 2/Page 2
- iii) Exhibit B/Tab 3/Schedule 3/Page 17
- a) Provide a Schedule that shows the TRC screening calculations for the Solar Pool Heating Program
- b) Provide details of the Budgets, incentives, targets for 2011
- c) Provide comparative technical data on efficiency of gas and solar pool heaters.
- d) Provide comparative calculations of annual fuel and \$ savings for gas and solar pool heaters

RESPONSE

a) The table below provides a breakdown of the 2011 filed assumptions for the Solar Pool program which were used as inputs into the current TRC calculator and resulted in the following TRC per participant. Please note that incentive and fixed program costs are not included in this TRC calculation.

Solar Pool TRC

	Gas	Electric	Free	Measure	Incremental	TRC per
	Savings	Savings	ridership	Life	Cost	Participant
	M3	kWh	%	Yrs	\$	\$
Existing	1116	-57	10	20	1450	1773.3

- b) The delivery details of the Solar Pool efficiency program are currently under development. Enbridge has not established detailed budget, incentives, and targets for this program at this time.
- c) The seasonal efficiency of a conventional gas-fired pool heating system is assumed to be 50% and there are currently no codes that define minimum values for the solar collector thermal efficiency.

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 4 Page 2 of 2

For more information please refer to Navigant Consulting Measures and Assumptions for Demand Side Management Planning presented to the Board on April 16, 2009, pages c-81-84.

Enbridge updated the natural gas savings assumptions with load research information as described in the Company's evidence at, Exhibit B, Tab 3, Schedule 3, page 17.

The assumptions for this program were submitted and Board approved as a part of the 2010 Update (EB-2009-0154). Extensive consultation for this program was completed by both Enbridge and Union's EAC.

d) Since this program is based on full replacement of a natural gas pool heater with solar, it is assumed the natural gas savings is 100%; therefore:

Annual fuel savings = 1116m³ based on load research of metered pool heaters

Annual dollar savings = \$286.62

(Current gas supply charge = .172987c/m³ x 1116 m³ = \$193.05 Delivery Charges = assuming .083840 c/m³, first block charge x 1116 = \$93.57)

Witnesses: A. Mandyam

Filed: 2010-08-19 EB-2010-0175 Exhibit I Tab 4 Schedule 5 Page 1 of 1

VECC INTERROGATORY #5

INTERROGATORY

References Exhibit B/Tab 2/Schedule 9/Page 2 para 4 (Table)

a) Provide a version of the referenced table with a column for deliverable/timing and a column for 2011 budget.

RESPONSE

As outlined in the referenced table, evaluation activities consist of verification studies that are undertaken to validate annual program results and other research studies that are undertaken in response to audit recommendations or on an as needed basis.

Verification studies must be completed in February of the year following completion of the program year in order for results to be included in the DSM Annual Report. Other research studies are of variable duration. It can be expected that, during 2011, some research initiated in 2010 will be completed in 2011 and other new projects will be initiated in 2011.

As stated in the DSM Plan, the nature, scope, and timing of evaluation research for 2011 will be developed in Q4 following a review of evaluation priorities with the EAC on completion of the 2009 DSM Audit.

Witnesses: A. Mandyam P. Squires