



PUBLIC INTEREST ADVOCACY CENTRE
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VIA MAIL and E-MAIL

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge St.
Toronto, ON
M4P 1E4

Dear Ms. Walli:

**Re: Vulnerable Energy Consumers Coalition (VECC)
Comments on Enbridge and Union Submissions
EB-2008-0384/0385 DSM Measures and Input Assumptions.**

Please find enclosed the detailed comments submitted on behalf of VECC in the above noted proceedings.

VECC does not have the resources to examine the details of the specific DSM measures and input assumptions for all measures. We have therefore focussed measures applicable to Low Income customers, including residential lighting, showerheads and weatherization.

We have compared key input assumptions between those provided by Union and Enbridge in their submissions and the latest OPA Measures and Input assumptions as per the OPA 2009 Measures and Assumptions List. As noted in the attachment we find important inconsistencies and differences.

The OPA measures and assumptions are key because on November 24, 2008 the Board commenced a proceeding with the stated goal of adopting the OPA Measures and Input assumptions for all electric CDM programs, replacing its own TRC Guide Assumptions.

The OPA is also viewed as independent with a very large Evaluation and Verification Budget and has no SSM incentive based on input assumptions. Accordingly the OPA measures and input assumptions must be viewed as the “gold standard” and should, *where applicable* be used by the gas utilities for their programs.

In examining the input assumptions for similar measures, the gas utilities have used the OPA as the key reference in several instances (i.e. water savings) but have not done so in other cases.

The gas utilities should be required to justify any differences in input assumptions from the OPA 2009 measures and assumptions list and re-file updated assumptions as necessary.

In VECC's view harmonizing the Gas DSM input assumptions to those of OPA is not merely an academic exercise; doing so will allow the Board to be confident that the best set of assumptions are used for the Gas DSM programs in 2009 and beyond.

The Board should defer its approval until harmonization has been done and the amendments reviewed and endorsed by the respective EACs of Union and Enbridge.

Yours truly,

Michael Buonaguro
Counsel for VECC
Encl.

IN THE MATTER OF the Ontario Energy Board Act 1998,
S.O.1998, c.15, (Schedule B);
AND IN THE MATTER OF an application by Enbridge Gas
Distribution Inc. seeking approval of certain demand side
management input assumptions for the 2008 program year.

Comments of Vulnerable Energy Consumers Coalition

Union and Enbridge Gas DSM Measures and Assumptions for Low income

The following extracts from the Union/Enbridge summary table and the OPA List illustrates the issues

Union Enbridge

Efficient Equipment & Technologies	Base Equipment & Technologies	Load Type	Natural Gas m3	Electricity kWh	Water L	Equipment Life Years	Incremental Cost		Free Ridership %	Notes	Reference
							Customer Installed	Contractor Installed			
LOW INCOME											
1. Faucet Aerator (kitchen, distributed, 1.5 GPM)	Average existing stock	base	22	-	7,800	10	\$2	-	1%	Union & Enbridge - Savings per aerator	updated
2. Faucet Aerator (bathroom, distributed, 1.5 GPM)	Average existing stock	base	6	-	2,000	10	\$1	-	1%	Union & Enbridge - Savings per aerator	updated
3a. Low-Flow Showerhead (Per household, Installed, 1.25 GPM)	2.0 GPM showerhead	base	33	-	8,900	10	-	\$15	1% / 5%	Union & Enbridge	updated
3b. Low-Flow Showerhead (Per household, Installed, 1.25 GPM)	2.1 - 2.5 GPM showerhead	base	47	-	12,400	10	-	\$15	1% / 5%	Union & Enbridge	updated
3c. Low-Flow Showerhead (Per household, Installed, 1.25 GPM)	2.6 + GPM showerhead	base	68	-	17,500	10	-	\$15	1% / 5%	Union & Enbridge	updated
4. Pipe Insulation	Water Heater w/o pipe insulation	base	17	-	-	15	-	\$4	1%	Union & Enbridge	EB-2006-0021 Phase II
5. Programmable Thermostat	Standard Thermostat	weather	152	26	-	15	-	\$50	1%	Union & Enbridge	updated
6. Weatherization	Existing home sample	weather	1,143	165	-	23	-	\$2,600	0%	Union & Enbridge	Enbridge 2007-2009 DSM Plan, updated

OTHER MEASURES										Free Ridership	
1. CFL (13W)	80W Incandescent	n/a	0	45	0	8	\$1.75		24%	Enbridge	Substantiation documents provided
2. CFL (23W)	175W Incandescent	n/a	0	49.7	0	8	\$2.00		24%	Enbridge	Substantiation documents provided

OPA

Measure	Detail Type	Seasonal Energy Savings Pattern	Load Shape #	Annual Energy Savings (kWh/yr)	Summer On Peak kWh	Winter On Peak kWh	Summer On Peak kWh	Winter On Peak kWh	Annual Water Savings (L/yr)	Natural Gas Savings (m3/yr)	EUL years	Incremental Cost (L/kWh)
Low Income Assumptions (LIA)												
34W CFL (LW)	Retrofit	OPA Res Lighting	5	30.4	0.001	0.004	0.001	0.009	-	-	8	\$9.00
CFL PAR30 (LW)	Retrofit	OPA Res Lighting	5	24.1	0.001	0.003	0.001	0.007	-	-	8	\$9.00
CFL Screw-In (Standard Spiral) (LW)	Retrofit	OPA Res Lighting	5	25.0	0.001	0.004	0.001	0.007	-	-	8	\$9.00
Energy Star® Refrigerator (LW) - 1.1 m³/yr	Discretionary Retrofit	OPA Res Refrigeration	9	846.0	0.008	0.083	0.087	0.105	-	-	14	\$604.00
Energy Star® Refrigerator (LW) - 1.1 m³/yr	Discretionary Retrofit	OPA Res Refrigeration	9	77.0	0.007	0.008	0.008	0.010	-	-		
Energy Star® Refrigerator (LW) - 1.1 m³/yr	Discretionary Retrofit	OPA Res Refrigeration	9	912.0	0.008	0.080	0.083	0.113	-	-	14	\$729.00
Energy Star® Refrigerator (LW) - 1.1 m³/yr	Discretionary Retrofit	OPA Res Refrigeration	9	69.0	0.006	0.007	0.007	0.009	-	-		
Daily Water Heat Recovery (LW)	Retrofit	OPA Res Water Heating	14	816.0	0.065	0.136	0.063	0.151	-	-	30	\$749.00
Domestic Hot Water Pipe Insulation (LW)	Retrofit	OPA Res Water Heating	14	38.0	0.003	0.006	0.003	0.007	-	-	6	\$5.00
Single Block Heater Timer (LW)	Retrofit	OPA Block Heater	15	580.0	0.000	0.000	0.000	0.000	-	-	10	\$25.00
Kitchen Faucet/Aerator (LW)	Retrofit	OPA Res Water Heating	14	22.0	0.002	0.004	0.002	0.004	7800	-	10	\$4.65
Bathroom Faucet Aerator (LW)	Retrofit	OPA Res Water Heating	14	6.0	0.000	0.001	0.000	0.001	2000	-	10	\$4.65
Low-Flow Showerhead (LW)	Retrofit	OPA Res Water Heating	14	377.0	0.000	0.063	0.029	0.070	12400	-	10	\$10.00
Comprehensive Draftproofing (LW)	Retrofit	OPA Res Space Heating SF	13	1,682.0	0.002	0.458	0.000	0.496	-	-	15	\$789.00
Wall Insulation (LIA)	Retrofit	OPA Res Space Heating SF	13	5,000.0	0.005	1.361	0.000	1.476	-	-	30	\$1,500.00
Attic Insulation (LW)	Retrofit	OPA Res Space Heating SF	13	1,444.0	0.001	0.393	0.000	0.425	-	-	30	\$967.00

Comparison Of Union/EGD and OPA measures for Low income

<u>Measure per Union/EGD</u>	<u>Union/EGD</u>		<u>OPA</u>	
	<u>Savings</u>	<u>Cost</u>	<u>Savings</u>	<u>Cost</u>
<u>1. Faucet Aerator</u>				
<u>Water savings/cost</u>	<u>7800 gal</u>	<u>\$2.00</u>	<u>7800</u>	<u>\$4.65</u>
<u>3b.Low Flow Showerhead 2.1-2.5 gpm</u>				
<u>Water savings/cost</u>	<u>12,400 gal</u>	<u>\$15.00</u>	<u>12,400 gal</u>	<u>\$10.00</u>
<u>3c Low Flow Showerhead 2.5+ gpm</u>				
<u>Water Savings/cost</u>	<u>17,500 gal</u>	<u>\$15.00</u>	<u>n/a</u>	<u>n/a</u>
<u>4.Pipe insulation</u>				
<u>Savings/life and cost</u>	<u>17 m3/10 yrs</u>	<u>\$4.00</u>	<u>0.003 kwh/6yrs</u>	<u>\$6.00</u>
<u>6. Weatherization</u>	<u>1143 m3</u>	<u>\$2600</u>	<u>Not applicable</u>	<u>n/a</u>
<u>Annual Savings/life and cost</u>	<u>165 kwh</u>		<u>3 measures</u>	
<u>Comprehensive Draftproofing (Elec Heat)</u>	<u>n/a</u>	<u>n/a</u>	<u>1682 kwh/15 yrs</u>	<u>\$789</u>
<u>Wall Insulation</u>	<u>n/a</u>	<u>n/a</u>	<u>5000 kwh/30 yrs</u>	<u>\$1500</u>
<u>Attic Insulation</u>	<u>n/a</u>	<u>n/a</u>	<u>1444 kwh/30 yrs</u>	<u>\$967</u>
<u>CFL(13w) Screw-in Standard</u>				
<u>Annual Savings/life and cost</u>	<u>45 kwh/8.yrs</u>	<u>\$1.75</u>	<u>25 kwh/8 yr</u>	<u>\$0.0</u>

Comments

1. The most serious difference is that OPA breaks down Weatherization into 3 specific measures (as does the Greensaver Federal energy audit)

Union and EGD are using an *average* based on samples from its own and OPA pilot programs to provide the estimated savings and costs.

This is not appropriate -the Weatherization should be broken out and assumptions generated for each measure

2 Minor differences between Union/Enbridge and OPA on showerheads and energy efficient lighting serve to illustrate the need for harmonization of input assumptions.