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December 23, 2010

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

Dear Ms. Walli:

Re: Enersource Application for Distribution Rates Effective May 1, 2011
(EB-2010-0078) - --- Responses to Interrogatories

Please find enclosed the responses to the interrogatories in the above-captioned proceeding. The responses will form Tab 8 of Enersource's evidence. Please also find enclosed an updated Index page that now includes Tab 8.

If further information is required, please do not hesitate to contact me at (905) 283-4098 or gdejulio@enersource.com .

Sincerely,

(Original signed by)

Gia M. DeJulio
Director, Regulatory Affairs

cc. Dan Pastoric, Executive Vice-President and Chief Operating Officer
Norman Wolff, Executive Vice-President and Chief Financial Officer

Response to Interrogatory from
Board Staff

Topic: *Shared Tax Savings*

References: *2011 IRM3 Shared Tax Savings Workform*
2011 IRM3 Rate Generator

Question:

Sheet "B1.1 – Rate Class and Re-Based Billing Determinants & Rates" of the 2011 IRM3 Shared Tax Savings Workform is reproduced below.

Last COS Re-based Year				2008						
Last COS OEB Application Number				EB-2007-0706						
Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Rate ReBal Base Service Charge D	Rate ReBal Base Distribution Volumetric Rate kWh E	Rate ReBal Base Distribution Volumetric Rate kW F	
RES	Residential Regular	Customer	kWh	166,825	1,594,788,347		13.92	0.0118		
GSLT50	General Service Less Than 50 kW	Customer	kWh	16,081	657,014,642		41.68	0.0115		
GSLT50	Small Commercial and USL - per connection	Customer	kWh	3,288	11,905,587		12.75	0.0193		
GSGT50	General Service 50 to 499 kW	Customer	kW	3,986		6,418,332	71.30		4.1602	
GSGT50	General Service 500 to 4,999 kW	Customer	kW	470		5,310,121	1,524.28		2.0761	
LU	Large Use > 5000 kW	Customer	kW	9		1,720,956	13,713.51		2.8918	
SL	Street Lighting	Connection	kW	48,255		115,190	1.33		10.1509	

Sheet "E1.1 – Rate Rebalanced Base Distribution Rates" of the 2011 IRM3 Rate Generator is reproduced below.

Monthly Service Charge

Class	Metric	Base Rate	Revenue Cost Ratio	Rate ReBal Base
Residential	Customer - 12 per year	11.750000	0.000000	11.750000
General Service Less Than 50 kW	Customer - 12 per year	39.510000	0.000000	39.510000
Small Commercial and USL - per meter	Customer - 12 per year	10.580000	0.000000	10.580000
General Service 50 to 499 kW	Customer - 12 per year	69.130000	0.000000	69.130000
General Service 500 to 4,999 kW	Customer - 12 per year	1,522.110000	0.000000	1,522.110000
Large Use > 5000 kW	Customer - 12 per year	13,711.340000	0.000000	13,711.340000
Street Lighting	Connection - 12 per year	1.330000	0.000000	1.330000

Volumetric Distribution Charge

Class	Metric	Base Rate	Revenue Cost Ratio	Rate ReBal Base
Residential	kWh	0.011800	0.000000	0.011800
General Service Less Than 50 kW	kWh	0.011500	0.000000	0.011500
Small Commercial and USL - per meter	kWh	0.019300	0.000000	0.019300
General Service 50 to 499 kW	kW	4.160200	0.000000	4.160200
General Service 500 to 4,999 kW	kW	2.076100	0.000000	2.076100
Large Use > 5000 kW	kW	2.891800	0.000000	2.891800
Street Lighting	kW	10.150900	0.000000	10.150900

Preamble: Board staff notes that "Rate ReBal Base Rates" from Sheet E1.1 of the 2011 IRM3 Rate Generator are supposed to be entered on Sheet B1.1 of the 2011 IRM3 Shared Tax Savings Workform.

a) Please explain the discrepancies between the two sheets cited above. If there are errors, please advise and Board staff will make the relevant corrections.

Response:

On B1.1 of the 2011 IRM3 Shared Tax Savings Workform, the information inputted in column D incorrectly included the Smart Funding Adder of $2.17 (May 1, 2010 – April 30, 2011). This input error has no effect on the total amount of shared tax savings; however, it does impact the tax sharing volumetric rate rider among classes as shown in the tables below. Please see below for the revised tax sharing volumetric rate rider.

Filed:

Rate Class	Fixed Metric	Vol Metric	Total Revenue $ by Rate Class	Total Revenue % by Rate Class	Total Z-Factor Tax Change$ by Rate Class	Billed kWh	Billed kW	Distribution Volumetric Rate kWh Rate Rider	Distribution Volumetric Rate kW Rate Rider
			A	B = A / $H	C = $I * B	D	E	F = C / D	G = C / E
Residential Regular	Customer	kWh	$46,684,950.4946	38.54%	-$494,475	1,594,788,347	0	-$0.0003	
General Service Less Than 50 kW	Customer	kWh	$15,598,741	12.88%	-$165,218	657,014,642	0	-$0.0003	
Small Commercial and USL - per connection	Customer	kWh	$732,842	0.60%	-$7,762	11,905,587	0	-$0.0007	
General Service 50 to 499 kW	Customer	kW	$30,111,966	24.86%	-$318,938	0	6,418,332		-$0.0497
General Service 500 to 4,999 kW	Customer	kW	$19,621,281	16.20%	-$207,824	0	5,310,121		-$0.0391
Large Use > 5000 kW	Customer	kW	$6,457,720	5.33%	-$68,399	0	1,720,956		-$0.0397
Street Lighting	Connection	kW	$1,939,432	1.60%	-$20,542	0	115,190		-$0.1783
			$121,146,933	100.00%	-$1,283,158				

Corrected:

Rate Class	Fixed Metric	Vol Metric	Total Revenue $ by Rate Class	Total Revenue % by Rate Class	Total Z-Factor Tax Change$ by Rate Class	Billed kWh	Billed kW	Distribution Volumetric Rate kWh Rate Rider	Distribution Volumetric Rate kW Rate Rider
			A	B = A / $H	C = $I * B	D	E	F = C / D	G = C / E
Residential Regular	Customer	kWh	$42,340,827.4946	36.44%	-$467,628	1,594,788,347	0	-$0.0003	
General Service Less Than 50 kW	Customer	kWh	$15,179,992	13.07%	-$167,653	657,014,642	0	-$0.0003	
Small Commercial and USL - per connection	Customer	kWh	$647,222	0.56%	-$7,148	11,905,587	0	-$0.0006	
General Service 50 to 499 kW	Customer	kW	$30,008,171	25.83%	-$331,421	0	6,418,332		-$0.0516
General Service 500 to 4,999 kW	Customer	kW	$19,609,043	16.88%	-$216,569	0	5,310,121		-$0.0408
Large Use > 5000 kW	Customer	kW	$6,457,485	5.56%	-$71,319	0	1,720,956		-$0.0414
Street Lighting	Connection	kW	$1,939,432	1.67%	-$21,420	0	115,190		-$0.1860
			$116,182,173	100.00%	-$1,283,158				

Response to Interrogatory from
Board Staff

Topic: *Disposition of Group 1 Deferral / Variance Account Balances*

Reference: *2011 IRM3 Deferral and Variance Account Workform*

Question:

Sheet "D1.6 Deferral Variance – Continuity Schedule Final" of the 2011 IRM3 Deferral and Variance Account Workform is reproduced below.

Account Description	Account Number	Opening Principal Amounts as of Jan-1-10	Adjustments - Please explain	Principal Amounts to be disposed	Opening Interest Amounts as of Jan-1-10	Interest on Board-approved 2008 amounts prior to transfer Jan-1, 2010 to Date of Transfer	Adjustments - Please explain	Projected Interest on Dec 31 -09 balance from Jan 1, 2010 to Dec 31, 2010	Projected Interest on Dec 31 -09 balance from Jan 1, 2011 to April 30, 2011	Interest Amounts to be disposed	Total Claim
		A	B	C = A + B	D	E	F	G	H	I = D + E + F + G + H	J = C + I
LV Variance Account	1550	222,740	638,728	861,468	(59,814)	60,322		6,215	2,521	9,244	870,712
RSVA - Wholesale Market Service Charge	1580	(16,956,242)	14,805,516	(2,150,725)	(1,205,120)	1,205,024		(15,515)	(6,293)	(21,904)	(2,172,629)
RSVA - Retail Transmission Network Charge	1584	(6,641,830)	2,407,008	(3,234,831)	66,491	(71,518)		(23,336)	(9,465)	(37,828)	(3,272,660)
RSVA - Retail Transmission Connection Charge	1586	(3,590,514)	887,818	(2,708,697)	(130,789)	126,806		(19,540)	(7,926)	(31,451)	(2,740,147)
RSVA - Power (Excluding Global Adjustment)	1588	(4,900,025)	8,288,868	3,388,843	(628,150)	653,010		24,447	9,916	39,223	3,428,065
RSVA - Power (Global Adjustment Sub-account)		37,088,531	(41,485,837)	(4,397,306)	279,366	(901,804)		(31,856)	(12,837)	(66,991)	(4,464,298)
Recovery of Regulatory Asset Balances	1590	(67,009)	67,009	(0)	41,313	(40,524)		(0)	(0)	789	789
Residual Balance Disposition and recovery of Def/Var Balances Account (2008)	1595	(203,108)		(203,108)	55,319			(1,465)	(594)	53,260	(149,848)
Total		5,956,533	(14,390,691)	(8,434,358)	(1,581,449)	1,611,315	0	(60,845)	(24,679)	(55,658)	(8,490,016)

[1] Principal Amount (-$203,108) + Interest Amount as of Jan. 1 / 10 - $55,319 = ($147,789)

Preamble: Enersource's RRR 2.1.1 filing for the period ending Dec. 31 / 2009 shows a balance of $(279,262) in Account 1595.

a) Please explain the adjustments entered in Column B.

b) Please explain the discrepancy between the Account 1595 balance of ($279,262) as provided in RRR 2.1.1 and the Account 1595 balance of ($147,789[1]) presented in the above cited sheet. If this is an error, please provide a corrected copy of Sheet D1.6 of the 2011 IRM3 Deferral and Variance Account Workform.

Response:

a) The adjustments in column B are taken from column A of Worksheet C1.4 - 2010 Transfer of 2008 Deferral/Variance accounts to 1595, which represents the OEB-approved disposition of Enersource's EDDVAR Application of Group 1 Accounts, issued on January 29, 2010.

b) The $(147,789) represents the 2008 Board-approved transfer of the 2006 Deferral/Variance accounts residual balance to account 1595 excluding interest accruing on the principle

balance. The difference between the 1595 account balance of ($279,262) as provided in the RRR and the ($147,789) in Sheet D1.6 Deferral variance – Continuity Schedule Final is ($131,473) which represents the interest accrued on the principal balance for the period May 1, 2008 to April 30, 2009. This difference in interest accrued of ($131,473) was not included in Sheet C1.1 2008 Transfer to 1595 COS as this worksheet did not accommodate an inclusion for interest accrued on the principal balance. Enersource recommends that this amount be included in Sheet D1.6 Deferral variance – Continuity Schedule Final column B "Adjustments".

Response to Interrogatory from
Board Staff

Topic: *Disposition of Group 1 Deferral / Variance Account Balances*

Reference: *2011 IRM3 Deferral and Variance Account Workform*

Preamble: Enersource has indicated that it plans to apply the 2011 Global Adjustment sub-account rate rider to the electricity component of the bill.

Question:

a) Please explain how loss factor adjustments are treated when applying the Global Adjustment sub-account rate rider to the electricity component of the bill.

Response:

The Global Adjustment (GA) sub-account rate rider is applied to the wholesale energy consumption for non-RPP customers (i.e., billed kWh) which includes loss factor adjustments when applied to the electricity component of the bill. The table below illustrates that wholesale energy consumption was used in calculating the electricity component of the GA rate rider (Reference Worksheets B1.3 Rate Class & Billing Determinants and G1.1c Energy Global Rate Rider).

GA for Non-RPP Customers	Wholesale Energy (kWh) (Includes Loss Factor)	
Residential	221,926,675	
General Service Less Than 50 kW	127,124,704	
Small Commercial and USL - per meter	437,224	
General Service 50 to 499 kW	2,196,293,796	
General Service 500 to 4,999 kW	2,219,512,667	
Large Use > 5000 kW	1,020,164,648	
Street Lighting	40,684,789	
Total Wholesale Energy (kWh) - (A)	5,826,144,503	kWh
GA Balance to be Refunded - (B)	($4,454,298)	
Calculation of Electricity Component Global Adjustment Rate Rider - (B)/(A)	($0.00076)	/kWh

Response to Interrogatory from
Board Staff

Topic: *RTSR Adjustments*

Reference: *2011 IRM3 RTSR Adjustment Workform*

Question:

Sheet "B1.2 - 2009 Distributor Billing Determinants" of the 2011 IRM3 RTSR Adjustment Workform is reproduced below.

Loss Adjusted Metered kWh	No
Loss Adjusted Metered kW	No

Rate Class	Vol Metric	Metered kWh A	Metered kW B	Applicable Loss Factor C	Load Factor D = A / (B * 730)
Residential	kWh	1,500,889,822	0	1.0360	
General Service Less Than 50 kW	kWh	653,001,289	0	1.0360	
Small Commercial and USL - per meter	kWh	10,792,397	0	1.0360	
General Service 50 to 499 kW	kW	2,112,001,401	6,352,348	1.0360	45.57%
General Service 500 to 4,999 kW	kW	2,173,434,670	5,081,457	1.0360	58.62%
Large Use > 5000 kW	kW	1,009,596,919	1,800,927	1.0145	76.84%
Street Lighting	kW	39,271,032	110,507	1.0360	48.71%
Total		7,498,987,530	13,345,239		

a) *Please explain why no loss factor has been applied to the data entered in Column A of Sheet B1.2 of the 2011 IRM3 RTSR Workform.*

Response:

No loss factor was applied to the data entered in column A of Sheet B1.2 of the 2011 IRM3 RTSR Workform. Pursuant to section 11.3.2.4 *"Step Three: Calculating Retail Transmission Service Rate"* of the Board's Electricity Distribution Rate Handbook, dated March 9, 2000, Enersource selected the option of not adjusting any of the transmission service charge determinants for losses.

Response to Interrogatory from
VECC

Topic: *Smart Meter Rate Adder 2011*

Reference: *i) OEB Guideline G-2008-0002:*
ii) OEB Filing Requirements for Smart Meter Investment Plans, October 26, 2006
iii) Managers Summary Page 3

Question:

a) Confirm that Guideline G-2008-0002 has not superseded the Filing Requirements for Smart Meter Investment Plans, October 26, 2006

b) Confirm that paragraph 7 of the Filing Requirements specifies that:

> *7. Specifically, and in as much detail as possible, please provide the following information for your planned implementation of the SMIP:*
> *• the number of meters installed by class and by year, both in absolute terms and as a percentage of the class;*
> *• the capital expenditures and amortization by class and by year;*
> *• the operating expenses by class and by year;*
> *• the effect of the SMIP on the level of the allowance for PILs.*

c) Did Enersource File its SMIP for the Combined SM proceeding in accordance with the Filing Guidelines? Please elaborate.

d) Has Enersource kept records by class as required by the Filing Guidelines and are accounts 1556 and 1555 segregated by rate class? Please elaborate.

Response:

a) Enersource is not aware of any Board direction instructing that G-2008-0002, i.e., the Board's Smart Meter Funding and Cost Recovery Guideline, issued October 22, 2008, supersedes the Filing Requirements for Smart Meter Investment Plans, dated October 26, 2006.

b) Confirmed.

c) Yes, on December 15, 2006, Enersource filed its Smart Meter Investment Plan in proceeding EB-2006-0246 in accordance with the Board's Filing Requirements for Smart Meter Investment Plans, dated October 26, 2006, in proceeding EB-2005-0529.

d) Enersource tracks the revenue from the Smart Meter Funding Adders by rate class. Certain capital costs are tracked by rate class; however, a portion of capital costs that relate to all customer classes are not tracked by rate class. Operating costs are tracked at the business unit level by expense type, not by rate class.

Accounts 1555 and 1556 are not segregated by rate class, as there is no requirement to do so pursuant to G-2008-0002.

Response to Interrogatory from
VECC

Topic: *Smart Meter Rate Adder 2011*

References: *i) Managers Summary Pages 3- 4*
ii) Smart Meter Rate Calculation Model Attachment C. Sheets 7 & 8

Preamble: *In its EB-2010-0209 Decision the Board stated:*

> *" the Board finds that PowerStream's original cost allocation methodology is reasonable and based on the principle of cost causality"*

Question:

a) *Provide the average unit capital costs (procurement and installation) and total capital costs for each of residential and GS<50kw meters to the end of 2010.*

b) *Provide an estimate of the SM rate adder revenue collected from each of the Residential and GS<50kw classes to the end of 2010. (average #customers * SM adder rate/metered customer/month). Prorate the carrying costs and reconcile to OEB Worksheet 7.*

c) *Provide the estimated 2011/12 total capital costs (procurement and installation) for each of the Residential and GS<50 kw classes.*

d) *Calculate class-specific proxy 2011/12 rate adders using capital cost as the cost driver for allocating the 2011/12 Revenue Requirement.(Sheet 8). The class specific rate adders should add to the same total 2011/2012 SM revenue as that projected from the aggregate SM rate adder of $2.12 (Worksheets 7 and 8)*

Response:

Enersource is not in a position to provide the class-specific information on capital costs and other costs requested absent an assumed cost allocation methodology. The Board's Smart Meter Funding and Cost Recovery Guideline issued October 22, 2008, G-2008-0002, which provides guidance in matters concerning smart meter funding adders, does not require the use of a cost allocation methodology as part of the evidence that will support the approvals sought by Enersource in this proceeding. Enersource has provided evidence in accordance with G-2008-0002.

Enersource rejects the apparent comparison of the approval that it is seeking with respect to a smart meter funding adder in this application and the relief that the Board approved in PowerStream's application in EB-2010-0209. Enersource's application seeks the Board's approval for a smart meter funding adder, while PowerStream's application sought final approval for smart meter related costs to the end of December 31, 2009 and other going forward costs. Given this, the bodies of evidence that are relevant to the applications of Enersource and PowerStream in their respective proceedings are fundamentally different.

Response to Interrogatory from
VECC

Topic: *LRAM*

Reference: *References: Attachment I Page 7 SeeLine Report Appendix A& B*

Preamble:

1) *Page 161 of the OPA 2009 Mass Market Measures and Assumptions states in respect of Low Income Residential Domestic Water Heater Tank Wrap:*

"Water heaters became regulated products under Canada's Energy Efficiency Regulations (February 3, 1995) Introduction for maximum allowable standby losses for electric water heaters required manufacturers to increase tank insulation levels for compliance. Post 1997 water heaters are considered better insulated, and would therefore not benefit from a supplemental wrap. Assuming an average 12 year life for water heaters, most existing models would not benefit from this measure. Even if only the oldest models were targeted, the benefits likely would not outweigh costs since a) such models likely would have to be replaced very soon anyway, and b) some manufacturers with fibreglass insulation models (i.e., those that would benefit from supplemental tank insulation) prohibit installing tank wraps on the grounds that they accelerate the tank deterioration process."

2) In addition, the 2009 OPA CI Measures and Assumptions List Page 74 provides the formula for calculating the savings from Commercial Hot water tank insulation

3) The 2010 Quasi-Prescriptive Measures List pages 29-30 also provides the formula for calculating Commercial Water Heater Tank wrap savings.

Question:

a) *Provide the rationale why Residential domestic hot water tank insulation blankets should be credited with savings in 2009 given the OPA position as outlined in the Preamble (1).*

b) *Provide a calculation of the annual savings for a typical (40 gallon?) DHW tank insulation blanket using the OPA Commercial Tank Wrap formula on page 29/30 of the Quasi-prescriptive Measures List.*

c) *Compare the result to the Kw and Kwh savings using the OEB assumptions used by Enersource and verified by SeeLine. (0.019 Kw and 270 Kwh)*

d) *Provide an alternative LRAM amount for 2009 using #units and 2010 OPA Quasi-Prescriptive assumptions to calculate Kwh and Kw.*

e) Adjust the Residential LRAM Claim and Rate rider.

Response:

a) Enersource implemented the Insulation Blankets measure in 2005, 2006 and 2007 and calculated the volumes lost from CDM programs using the latest input assumptions at the time of the third party assessment in accordance with the Board's CDM Guidelines. Therefore, Enersource asserts that its savings claims with respect to insulation blankets on water heaters is appropriate.

The reference in the question (Page 161 of the OPA 2009 Mass Market Measures and Assumptions) relates to measures "not recommended for Low Income Programs". These measures are not recommended due to unfavourable cost effectiveness of each measure given their projected implementation cost, rather than their ability to generate savings.

Enersource's position that hot water tank insulation blankets should be credited with energy savings is consistent with the recommendations of NRCan's Office of Energy Efficiency (OEE) . Please refer to the information provided in: http://oee.nrcan.gc.ca/residential/personal/water-heater-oil-electric.cfm?attr=4#reducStanbdy).

Enersource will not make presumptions on the significance of the information provided in the preamble to the question.

b) Enersource calculated annual savings for a typical 40 gallon (150 litres) Domestic Hot Water tank, using the formula provided in the 2010 Quasi-Prescriptive Measures List (pages 29-30) for calculating heat loss savings in Commercial Water Heaters, through the adoption of a tank insulating jacket. Details are found in the table below:

HOT WATER TANK INSULATION Stand-by (Jacket) Losses Based on 2010 Quasi-Prescriptive Measures and Assumptions Rel. 1, Jan 2010, page 29-30 and Appendix A				
	Commercial		**Residential**	
	(m3)	(gal)	(m3)	(gal)
V-Volume	1.0	264.172	0.151417	40
h-Tank Height (m)	1.6	m	1.2	
r-Tank Radius (m)		m		
R Thermal Resistance	0.705	m2-°K/W	0.705	
T-Water	55	°C	55	
T-Amb	21.1	°C	21.1	
Boiler efficiency (η)	95%		95%	
H-Hot Water Usage (h)	8760	h	8760	
t-Insul. Thickness (m)	0.0924	m	0.0924	
r-Insul (outside radius) r+t				
R-Insul. Thermal Resistance	2.11	m2-°K/W	2.11	
Base Measure Annual Consumption (Energy Loss):				
r-Tank Radius =SQRT[V/(pi x h)]	0.446144	m	0.200462	
A-base 2 x pi x r-Tank x h	4.482856	m2	1.510678	
q-base (W)= [A-base x(Tw-Ta)/R-base]	215.5586	W	72.64114	
Annual Energy Cons (kWh/y)base				
kWh/y=[q-base(W) / 1000W/kW) x H]/eff	**1987.7**	**kWh**	**669.8**	
Base + Insulation Jacket CDM Measure:				
A-ins 2xpix(r-Tank+t)xh	5.411291	m2	2.207005	
q-ins (W)= [A-ins x(Tw-Ta)/(R-base+R-ins)]	65.16617	W	26.57814	
Annual Energy Cons (kWh/y)conservation				
kWh/y=[q-ins(W) / 1000W/kW) x H]/eff	**600.9**	**kWh**	**245.1**	
Annual Savings (kWh)	**1386.8**	**kWh**	**424.7**	
Average Peak Demand Savings				
H-period Summer Peak Hours (On-Peak period)	522	hours	522	
Com Water Heating Seasonal Energy Savings Pattern (SESP for On-Peak period)	5.60%		5.60%	
Average Summer Peak Demand Savings (kW)				
kW=Annual Savings kWh x %SESP / H-period	**0.1488**	**kW**	**0.0456**	

c) Results using the above formula show that 424.7 kWh/year and 0.045 kW savings are possible. This is considerably higher than the 270 kWh/year and 0.019 kW savings prescribed by the OEB assumptions and used by Enersource, as verified by SeeLine.

d) and e)

Enersource has calculated the LRAM claim based on the Board's CDM Guidelines and finds that use of commercial assumptions on residential applications is inappropriate. If commercial assumptions were to be applied on residential hot water tanks, the claim would increase as calculated above, which Enersource assesses to be unreasonable.

Response to Interrogatory from
VECC

Topic: *LRAM*

Reference: Attachment I Page 7 SeeLine Report Appendix A& B

Question:

a) For LRAM the Guidelines and Policy Letter of January 27, 2009 Specify that

> ***LRAM***
> *The input assumptions used for the calculation of LRAM should be the best available at the time of the third party assessment referred to in section 7.5.*
>
> *For example, if any input assumptions change in 2007, those changes should apply for LRAM purposes from the beginning of 2007 onwards until changed again*
>
> *Confirm that the Third Tranche and Rate Funded LRAM Claims used only input assumptions from the OPA 2010 Prescriptive Measures and Assumptions Lists. If not, then list all exceptions and the sources of the inputs. (other than Water Heater Blankets)*

b) Confirm the lifetime and free-ridership assumption for CFLs 2005-2008.

c) For CFLs installed in 2005 has/should a persistence factor be applied? Discuss.

Response:

a) In accordance with the Board's CDM Guidelines, Enersource calculated the volumes lost from CDM programs using the latest input assumptions at the time of the third party assessment. For OPA-funded programs, Enersource adopted the "2006-2008 OPA Conservation Program Results – Enersource Hydro Mississauga". These results are presented in Table 1 Tab 3, page 7 of 11 in EB-2010-0078.

Please also refer to Appendices A to E of Attachment I, SeeLine Group Ltd.'s Independent Third Party Review of Enersource's 2010 LRAM claim.

b) As stated in the OPA's "2010 Prescriptive Measures and Assumptions List", the useful life for CFLs is approximately eight (8) years. The freeridership rate used by Enersource for CFLs distributed under the Water Heater Tune-up Program was 10% in 2005 and 2006, and 22% in 2007. A 1% freeridership rate was used for CFLs distributed under Social Housing initiatives for all years, in alignment with the OEB's Decision in EB-2007-0096.

c) Yes. The OEB-issued "Inputs and Assumptions for Calculating Total Resource Cost", dated March 28, 2008, states that "…distributors should assume 100% persistence in assessing CDM cost effectiveness unless otherwise updated by the Board." Enersource has used a persistence factor of 100% in its calculations. SeeLine's Independent Third Party Review confirms that the persistence factor was used by Enersource correctly.

Response to Interrogatory from
VECC

Topic: *LRAM*

References: *Appendix 1 SeeLine Report:*
- *i) Appendices A&B Third Tranche Programs and*
- *ii) Appendices D and E OPA Programs*
- *iii) Appendix E OPA Results Extract*

Question:

a) *EKC Retailer Programs 2005-2007 are Listed as Third Tranche Please Explain why they are also listed under OPA Results Appendix F. Lines 8 and 22 Please clarify.*

b) *Provide **details** of the OPA EKC campaigns from 2006-2009 that add to the data shown in Appendix F Residential lines 8 and 22- Every Kilowatt counts–*

i. *# units*
ii. *unit and total kwh savings,*
iii. *operating hours,*
iv. *lifetime and*
v. *free ridership*

for each year 2006-2009 (include prior years if required)

c) *Reconcile the OPA EKC results from Appendix E to the savings and revenue for each year and the Total Revenue as reported in the following Tables:*

- *SeeLine Report Appendix A*
  2005-88 kw and 773,747 kwh
- *SeeLine Report Appendix B*
  2006 168Kw and 14,623,243 Kwh

d) *Reconcile the Summer Savings/Sweepstakes OPA results from Appendix F to the savings and revenue for each year and the Total Revenue as reported in the following Tables:*

- *SeeLine Report Appendix D*
  2006-137 kw and 542,259 kwh
- *SeeLine Report Appendix E*
  2009 0.102 Kw and 0.2422 kw
  Line 3 - 14,253 Kwh
  Line 22 -4,627 Kwh

Response:

a) The EKC retail program was Third Tranche-funded in 2005 and 2006 and thus was listed as such. In 2007, it was funded by the OPA and thus was listed as an OPA program.

b) The table below provides the details on OPA EKC campaigns implemented in 2006 and 2007. The total of 0.1681 MW for 2006 and 0.2013 MW for 2007 in the table matches the information in lines 3 and 8 in Attachment I, pages 12 and 13 (which is Appendix F). The total of 14,253 MWh for 2006 and 5,198 MWh for 2007 are found in the appropriate lines for EKC in Appendices B and C, respectively. The other information in the table is sourced from Attachment H.

		Unit Savings Assumptions					Net Savings	
		Activity Results (#)	Gross Summer Peak Demand Savings (kW)	Gross Annual Energy Savings (kWh)	Aggregate Net-to-Gross Adjustment (%)	Effective Useful Life (EUL)	Net Summer Peak Demand Savings (MW)	Net Annual Energy Savings (MWh)
		A	B	C	D	E	F=AxBxD%/1000	G=AxCxD%/1000
	2006							
1	Energy Star® Compact Fluorescent Light Bulb - Spring Campaign	53,223	0.0000	104.4	90	4.0	0.0000	5,001
2	Electric Timers - Spring Campaign	1,492	0.0000	183.0	90	20	0.0000	246
3	Programmable Thermostats - Spring Campaign	649	0.0500	216.0	90	15.0	0.0292	126
4	Energy Star® Ceiling Fans - Spring Campaign	494	0.0140	141.0	90	20	0.0062	63
5	Energy Star® Compact Fluorescent Light Bulb - Autumn Campaign	78,914	0.0000	104.4	90	4.0	0.0000	7,415
6	Seasonal Light Emitting Diode Light String - Autumn Campaign	18,994	0.0000	30.8	90	30	0.0000	526
7	Programmable Thermostats - Autumn Campaign	1,252	0.1177	522.1	90	18.0	0.1327	588
8	Dimmers - Autumn Campaign	990	0.0000	139.0	90	10	0.0000	124
9	Indoor Motion Sensors - Autumn Campaign	355	0.0000	209.0	90	20.0	0.0000	67
10	Programmable Basebaord Thermostats - Autumn Campaign	75	0.0000	1,466.3	90	18	0.0000	98
	2006 Annual Totals						**0.1681**	**14,253**
	2007							
1	15 W CFL	94,329	0.0013	43.0	78	8	0.0956	3,164
2	20+ W CFL	15,356	0.0019	62.1	78	8	0.0228	744
3	Energy Star® Light Fixture	366	0.0056	122.9	55	16	0.0011	25
4	T8 Fluorescent Tube	718	0.0012	37.2	77	18	0.0007	21
5	Seasonal LED Light String	24,991	0	13.7	49	5	0.0000	168
6	Project Porchlight CFL	19,850	0.0013	43.0	76	8	0.0196	649
7	Solar Light	12,110	0	4.8	13	5	0.0000	8
8	Energy Star® Ceiling Fan	761	0.0028	89.8	55	10	0.0012	38
9	Furnace Filter	3,066	0.0112	37.7	55	1	0.0189	64
10	Power Bar with Timer	335	0.0063	72.4	77	10	0.0016	19
11	Lighting Control Device	3,880	0.0185	72.2	55	10	0.0395	154
12	Outdoor Motion Sensor	1,211	0	159.8	55	10	0.0000	106
13	Dimmer Switch	770	0.0007	23.7	55	10	0.0003	10
14	Programmable Thermostat	740	0	75.1	55	15	0.0000	31
	2007 Annual Totals						**0.2013**	**5,198**

Enersource did not participate in 2008 and 2009 OPA EKC campaigns and therefore did not claim any savings for those programs in those years. The reference in the question to line 22 is not relevant because it refers to results in 2008.

c) Enersource assumes that the question should refer to “Appendix F”, not “Appendix E”. (In addition, Enersource points out that in Appendix B of Attachment I, the column “Source of Input Assumptions” in the line for the EKC program should have referred to “Appendix F” and not “Appendix E”.)

The 2005 figures of 88 kW and 773,747 kWh cannot be found in Attachment I, Appendix F as Appendix F does not show 2005 information. These figures are shown in Attachment G, page 2 of 6, line 6, along with the associated lost distribution revenues. The 2006 figures of

168 kW and 14,253,243 kWh (not 14,623,243 kWh, as referenced in the question) are shown in Attachment I, Appendix F as mentioned in the response to question (b) above. These are also shown in Attachment G, page 3 of 6, line 6, along with the associated lost distribution revenues.

d) Based on the numbers provided in the first part of question (d), Enersource assumes that it should be referring to "2008" not "2006". The OPA Summer Savings/Sweepstakes results from Appendix F (line 24), 0.1372 MW, reconciles with savings in SeeLine's Report Appendix D for 2008: 137 kW and 542,259 kWh.

The second part of question (d) referring to "Line 3 - 14,253 Kwh and Line 22 -4,627 Kwh" appears to refer to numbers reported in Appendix F, not Appendix E, and appears to refer to the EKC program results and not to Summer Savings/Sweepstakes.

The reference to "SeeLine Report Appendix E 2009 0.102 Kw and 0.2422 kw" does not exist. Enersource did not participate in Summer Savings/Sweepstakes in 2009 nor did it participate in EKC in 2009.

I N D E X