

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
26th Floor, Box 2319
Toronto, ON M4P 1E4

December 23, 2010

Dear Ms. Walli

**Re: PowerStream Inc. (Licence Name PowerStream Inc. ED-2004-0420)
2011 Electricity Distribution Rate Adjustment Application EB-2010-0110 /
EB-2010-0365**

**Response to Vulnerable Energy Consumers Coalition (VECC)
interrogatories of December 9, 2010**

Please find attached PowerStream's responses to the VECC's Interrogatories of December 9, 2010 in PDF format. Please note that this document is also being filed on the Board's web portal and emailed to the intervenor on the record.

If you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

Original Signed by

Tom Barrett
Manager, Rate Applications

Copy to: Michael Buonaguro
Counsel for VECC

VECC IRs - Responses

LRAM SSM

VECC IR# 1

References: Appendix 3 SeeLine Report pages 8 &9 and Tables 4&5

Preamble: Using its SeeTool™ software SeeLine has reviewed PowerStream's SSM claim and finds that the prescriptive measure and input assumptions used by PowerStream are those currently posted by the OPA which is in accordance to Board policy. Results from this analysis are shown in the tables below.

a) Confirm that the current CDM Guidelines and Policy Letter as referenced above specify that

SSM

Assumptions used from the beginning of any year will be those assumptions in existence in the immediately prior year. For example, if any input assumptions change in 2007, those changes should apply for SSM purposes from the beginning of 2008 onwards until changed again....

b) Confirm that the SSM Claims used only input assumptions from the OPA 2010 Prescriptive Measures and Input Assumptions Lists. If not, then list all exceptions and the sources of the inputs.

c) When (year and date) did the OPA change its Input assumptions (unit savings and free ridership) for CFLs under the Every Kilowatt Counts Campaigns.

d) Provide a copy of the SeeLine EKC calculators before and after the change.

Confirm /Show how the EKC assumptions compare to the latest OPA Prescriptive Measures and Input Assumptions

e) Provide a copy of the spreadsheet showing the SSM calculation as filed.

Reconcile to Tables 4 and 5

f) Explain

i. why the free ridership was maintained at historic levels for mass market measures and

ii. whether a persistence factor should be applied to CFLs installed in 2005 and 2006

Response

a) Confirmed

b) PowerStream Barrie used only input assumptions from the OPA 2010 Prescriptive Measures and Input Assumptions Lists. PowerStream South's SSM claim used the assumptions in existence in the immediately prior year,

as per OEB guidelines. See response to Board Staff IR # 5 for PowerStream South for further details.

- c) The input assumptions for CFL unit savings were created by the OPA in February 2008; some of them were updated in May 2008.

PowerStream used those updated assumptions in its previous LRAM claim (part of PowerStream 2009 Cost of Service Application, EB-2008-0244), as shown in the PowerStream Settlement Proposal, Schedule H, Page 88.

All updates to CFL input assumptions are reflected in the OPA list "2010 Prescriptive Measures and Assumptions", which has been used by PowerStream to prepare its current application

Please note that free ridership rates and other adjustment factors are not included in any of the OPA Measures and Assumptions Lists.

- d) The Every Kilowatt Counts programs are run by the OPA and as such are not eligible for SSM, as per OEB guidelines. PowerStream's SSM claim relates to its 3rd tranche programs only. The EKC calculator has not been used in those calculations.
- e) The details of the TRC net benefits calculation are presented in the attached schedules VECC 1.1 and VECC 1.2; the net TRC benefits correspond to tables 4 and 5 of SeeLine report.
- f)
- i. The free ridership rates for mass market measures were taken from the OEB "Inputs and Assumptions For Calculating Total Resource Cost" (March 28, 2008). Those free ridership rates represent the best available information at the time when the PowerStream LRAM application was prepared. In its application, PowerStream followed the OEB guidelines of March 28, 2008 (EB-2008-0037). According to those guidelines, verification and evaluation of free ridership rates are not required.
 - ii. In preparing its LRAM application, PowerStream followed the guidance of the OEB, particularly the letter of March 28, 2008, "Inputs and Assumptions for Calculating Total Resource Cost", which specifies that *"at this time, distributors should assume 100% persistence in assessing CDM cost effectiveness unless otherwise updated by the Board. While persistence is not likely 100%, for practicality, it is necessary to make some simplifying assumptions."* There have been no updates of persistence factors by the OEB or the OPA. Consequently, PowerStream used 100% persistence factor for all the measures, including CFLs, in its LRAM application.

VECC IR# 2

LRAM

References: Appendix 3 SeeLine Report Appendices A & B

Preamble: As part of its review SeeLine conducted the following activities as outlined by the OEB in its Guidelines:

- Confirm that the inputs are those in accordance to Board's policy.
Where any inputs assumptions have changed in previous years, confirm that the input assumptions were implemented consistent with section 7.3 of the Guidelines;
- Where the distributor has varied from the input assumptions posted on the Board's website, review the reasonableness for the input assumptions used..

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

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 LRAM Claims used only input assumptions from the OPA 2010 Prescriptive Measures and Input Assumptions Lists. If not, then list all exceptions and the sources of the inputs.

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

c) For CFLs installed in 2005 should a persistence factor be applied? Please discuss.

Response

a) Confirmed.

b) See VECC Schedule 2 attached.

c) See response to VECC-1f (ii).

VECC IR# 3

References: Appendix 3 SeeLine Report Appendices C&D

a) Provide **details** of the OPA EKC campaigns from 2006-2009 that add to the data shown in Appendix C&D - Residential lines 10 and 25- Every Kilowatt counts-- for each year 2007-2008 (include prior years if required)

- i. # units
- ii. Unit and total kwh savings,
- iii. Operating hours,
- iv. Lifetime and
- v. free ridership

b) Reconcile to

Appendix C 2007-0.25 Mw, 2008-0.23Mw Total 1.09Mw
2007-1498 Mwh; 2008-1498 Mwh Total 6075 Mwh
Appendix D 2007-0.07 Mw, 2008-0.06 Mw 2008 Total 0.09 Mw
2007-1761 Mwh; 2008-1739 Mwh total 1600 Mwh

c) Reconcile the OPA results from Part a) to the savings and revenue for each year and the Total Revenue as reported in the following Tables

- SeeLine Report Page 11 (Barrie) and Pages 16 &17(PowerStream South)
- Managers Summary Schedule 3 (PowerStream South)
2007-252 Kw, 2008-228 Kw;
2007-6,552 Mwh; 2008-6,472 Mwh
LRAM 2007-\$83,871; 2008-\$83,502
- Managers Summary Schedule 6 (Barrie)
2007-68 Kw, 2008-61 Kw;
2007-1760 Mwh; 2008-1739 Mwh
LRAM 2007- \$22,712; 2008-\$23,481

Response

a) As the titles of Appendices C and D of the SeeLine Report suggest, the numbers in those appendices are excerpts from 2006-2008 OPA Conservation Reports. Those reports were produced by the OPA and distributed to local utilities; the savings amounts were calculated by the OPA. To calculate the lost revenues (LRAM) PowerStream used the net savings amounts from the OPA report, using the same methodology that has been previously approved by the OEB in Enersource's LRAM application (EB-2009-0400).

The details for EKC programs, available in the OPA report, as well as the calculation of the savings numbers (formula is provided by OPA staff) are shown in attached Schedules VECC 3.1(a) and 3.2 (a). The details for

operating hours are not available in the OPA report.

- b) The reconciliation to the amounts in appendix C and D is provided in Schedules VECC 3.1(b) and 3.2(b). Please note :
- Appendixes C and D do not have total amounts – the numbers in the OPA reports represent the annual savings from the programs; no cumulative calculation is done.
 - The consumption quoted in VECC IR 3(b) for Appendix C (PowerStream South) does not refer to the EKC program, but to the Cool Savings program. Schedule 3.1 shows reconciliation to the numbers in the SeeLine report.
- c) Please see schedule VECC 3.3 attached.

2008 TRC Model

Discount Rate
 7.30%

Electricity Savings

Program	Participants [gross]	Free Ridership %	Measure Life	Program Delivery Costs	Energy								Demand		COMMENTS	
					Winter			Summer			Shoulder		Demand Type (C or DR)	Peak Demand Savings (Summer)		
					On Peak	Mid Peak	Off Peak	On Peak	Mid Peak	Off Peak	Mid Peak	Off Peak				
					602 Hours	688 Hours	1,614 Hours	522 Hours	783 Hours	1,623 Hours	1,305 Hours	1,623 Hours				
Social Housing	-	0.0%	0	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	0.00	OEB Measure List OEB Measure List (11W CFL used as a proxy) OEB Measure List (20 W CFL used as a proxy) OEB Measure List
CFLs (11W)	870	1.0%	3	\$ -	9.98	4.99	13.11	0.00	7.57	8.99	11.25	11.40	C	0.00		
CFLs (13W)	12,529	1.0%	3	\$ -	9.98	4.99	13.11	0.00	7.57	8.99	11.25	11.40	C	0.00		
CFLs (23W)	1,106	1.0%	4	\$ -	18.92	9.46	24.86	0.00	14.36	17.05	21.34	21.62	C	0.00		
CFLs (27W)	189	1.0%	3	\$ -	25.11	12.56	33.00	0.00	19.05	22.63	28.32	28.69	C	0.00		
Program Costs	-	0.0%	0	\$ 94,178.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	0.00	
	-	0.0%	0	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	0.00	

2006 TRC Model - Barrie Hydro

Discount Rate

6.81%

Program	Participants [gross]	Free Ridership %	Measure Life	Distribution Line Losses	Unit Incremental Costs	Program Delivery Costs	Electricity Savings							
							Energy							
							Winter			Summer			Shoulder	
							On Peak	Mid Peak	Off Peak	On Peak	Mid Peak	Off Peak	Mid Peak	Off Peak
							602 Hours	688 Hours	1,614 Hours	522 Hours	783 Hours	1,623 Hours	1,305 Hours	1,623 Hours
Residential/Small Business Electrical Appliance Rebate Program	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerator	612	10.0%	14	0.00%	\$50.00	\$ -	6.67	7.68	19.09	7.43	11.04	22.65	15.88	22.37
Air Conditioner	20	10.0%	18	0.00%	\$650.00	\$ -	0.00	0.00	0.00	33.98	29.06	64.62	1.95	3.69
Central Air	50	10.0%	18	0.00%	\$475.00	\$ -	0.00	0.00	0.00	72.65	62.13	138.17	4.16	7.89
Clothes Washer	656	10.0%	14	0.00%	\$137.51	\$ -	14.08	15.88	33.61	8.92	16.73	31.89	27.81	32.34
Dishwasher	486	10.0%	11	0.00%	\$45.00	\$ -	0.71	0.63	1.08	0.29	0.84	1.00	1.32	1.13
Freezer	40	10.0%	21	0.00%	\$50.00	\$ -	2.70	3.34	7.74	2.98	4.38	9.21	6.61	8.84
	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Education and Training	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL 15 W	11,900	10.0%	8	0.00%	\$2.02	\$ -	3.87	3.60	8.62	0.78	4.28	7.87	6.56	8.78
LED Christmas Lights	50	5.0%	5	0.00%	\$0.59	\$ -	3.47	3.47	6.56	0.00	0.00	0.00	0.00	0.00
Refrigerator	1	10.0%	14	0.00%	\$50.00	\$ -	6.67	7.68	19.09	7.43	11.04	22.65	15.88	22.37
	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Non-Profit Housing - Electrical Conservation Pilot	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 4 ft to T8	253	1.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T12 8ft to T8	37	1.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dishwasher	20	1.0%	11	0.00%	\$45.00	\$ -	0.71	0.63	1.08	0.29	0.84	1.00	1.32	1.13
Refrigerator	218	1.0%	14	0.00%	\$50.00	\$ -	6.67	7.68	19.09	7.43	11.04	22.65	15.88	22.37
	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Research	1	0.0%	0	0.00%	\$0.00	\$ -	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFL 15 W	600	10.0%	8	0.00%	\$2.02	\$ -	3.87	3.60	8.62	0.78	4.28	7.87	6.56	8.78

2006 TRC Model - Barrie Hydro

Discount Rate

6.81%

Summary of Fuel Savings

Program	Demand		COMMENTS	Energy									Demand	Energy					
	Demand Type (C or DR)	Peak Demand Savings (Summer)		Annual kWh Savings	Winter			Summer			Shoulder		Peak Demand Savings (Summer)	Winter			Summer		
					On Peak	Mid Peak	Off Peak	On Peak	Mid Peak	Off Peak	Mid Peak	Off Peak		On Peak	Mid Peak	Off Peak	On Peak	Mid Peak	Off Peak
Residential/Small Business Electrical Appliance Rebate Program	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
Refrigerator	C	0.02	2010 OPA Measure List	62,135.75	3,673.84	4,230.14	10,514.77	4,092.44	6,080.83	12,475.62	8,746.70	12,321.40	8.65	\$4,245	\$3,477	\$5,619	\$4,727	\$5,182	\$6,311
Air Conditioner	C	0.15	2010 OPA Measure List	2,399.40	0.00	0.00	0.00	611.64	523.08	1,163.16	35.10	66.42	2.62	\$0	\$0	\$0	\$846	\$535	\$710
Central Air	C	0.31	2010 OPA Measure List	12,825.00	0.00	0.00	0.00	3,269.25	2,795.85	6,217.65	187.20	355.05	14.02	\$0	\$0	\$0	\$4,519	\$2,858	\$3,795
Clothes Washer	C	0.02	2010 OPA Measure List	107,015.90	8,312.83	9,375.55	19,843.34	5,266.37	9,877.39	18,827.86	16,419.02	19,093.54	11.99	\$9,605	\$7,706	\$10,604	\$6,083	\$8,418	\$9,525
Dishwasher	C	0.00	2010 OPA Measure List	3,061.80	310.55	275.56	472.39	126.85	367.42	437.40	577.37	494.26	0.22	\$300	\$188	\$205	\$120	\$258	\$182
Freezer	C	0.01	2010 OPA Measure List	1,648.80	97.20	120.24	278.64	107.28	157.68	331.56	237.96	318.24	0.23	\$148	\$131	\$201	\$163	\$179	\$225
	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
Consumer Education and Training	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
CFL 15 W	C	0.00	2010 OPA Measure List	475,095.60	41,447.70	38,556.00	92,320.20	8,353.80	45,838.80	84,287.70	70,257.60	94,033.80	14.99	\$31,152	\$20,238	\$29,755	\$5,901	\$24,255	\$26,458
LED Christmas Lights	C	0.00	2010 OPA Measure List	641.25	164.83	164.83	311.60	0.00	0.00	0.00	0.00	0.00	0.00	\$85	\$60	\$66	\$0	\$0	\$0
Refrigerator	C	0.02	2010 OPA Measure List	101.53	6.00	6.91	17.18	6.69	9.94	20.39	14.29	20.13	0.01	\$7	\$6	\$9	\$8	\$8	\$10
	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
Municipal Non-Profit Housing - Electrical Conservation Pilot	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
T12 4 ft to T8	C	0.00	2010 OPA Measure List	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
T12 8ft to T8	C	0.00	2010 OPA Measure List	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
Dishwasher	C	0.00	2010 OPA Measure List	138.60	14.06	12.47	21.38	5.74	16.63	19.80	26.14	22.37	0.01	\$14	\$9	\$9	\$5	\$12	\$8
Refrigerator	C	0.02	2010 OPA Measure List	24,346.65	1,439.52	1,657.50	4,120.00	1,603.54	2,382.65	4,888.32	3,427.22	4,827.89	3.39	\$1,663	\$1,362	\$2,202	\$1,852	\$2,031	\$2,473
	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
Research	C	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0	\$0	\$0	\$0	\$0	\$0	
CFL 15 W	C	0.00	2010 OPA Measure List	23,954.40	2,089.80	1,944.00	4,654.80	421.20	2,311.20	4,249.80	3,542.40	4,741.20	0.76	\$1,571	\$1,020	\$1,500	\$298	\$1,223	\$1,334

2006 TRC Model - Barrie Hydro

Discount Rate

6.81%

input

Summary of TRC Benefits

Summary of TRC Costs

Summary of TRC Net Benefits

Program	Shoulder		Demand			Electricity Savings (NPV)	Total Incremental Equipment Costs	Total Program Delivery Costs	TRC Benefits (NPV)	TRC Costs (NPV)	TRC Net Benefits (NPV)
	Mid Peak	Off Peak	Generation	Transmission	Distribution						
Residential/Small Business Electrical Appliance Rebate Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Refrigerator	\$7,600	\$5,781	\$3,812	\$412	\$422	\$47,588	\$27,540	\$0	\$47,588	\$27,540	\$20,048
Air Conditioner	\$36	\$38	\$1,303	\$154	\$153	\$3,774	\$15,300	\$0	\$3,774	\$15,300	(\$11,526)
Central Air	\$194	\$202	\$6,966	\$826	\$816	\$20,177	\$21,375	\$0	\$20,177	\$21,375	(\$1,198)
Clothes Washer	\$14,266	\$8,958	\$5,283	\$570	\$585	\$81,604	\$81,186	\$0	\$81,604	\$81,186	\$418
Dishwasher	\$417	\$189	\$87	\$8	\$9	\$1,961	\$19,683	\$0	\$1,961	\$19,683	(\$17,722)
Freezer	\$273	\$202	\$123	\$15	\$15	\$1,674	\$1,800	\$0	\$1,674	\$1,800	(\$126)
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Consumer Education and Training	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CFL 15 W	\$38,824	\$26,769	\$5,157	\$401	\$437	\$209,347	\$21,634	\$0	\$209,347	\$21,634	\$187,713
LED Christmas Lights	\$0	\$0	\$0	\$0	\$0	\$211	\$28	\$0	\$211	\$28	\$183
Refrigerator	\$12	\$9	\$6	\$1	\$1	\$78	\$45	\$0	\$78	\$45	\$33
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Municipal Non-Profit Housing - Electrical Conservation Pilot	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
T12 4 ft to T8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
T12 8ft to T8	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Dishwasher	\$19	\$9	\$4	\$0	\$0	\$89	\$891	\$0	\$89	\$891	(\$802)
Refrigerator	\$2,978	\$2,265	\$1,494	\$161	\$165	\$18,646	\$10,791	\$0	\$18,646	\$10,791	\$7,855
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Research	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CFL 15 W	\$1,958	\$1,350	\$260	\$20	\$22	\$10,555	\$1,091	\$0	\$10,555	\$1,091	\$9,465

Total TRC - measures included in the SSM Claim

Program costs - Rebate Program

Program Costs - Consumer education

Program Costs - Research

Total 2006 TRC Net Benefits

\$194,340

(\$5,792)

(\$14,747)

(\$33,904)

\$139,897

2008 Third Tranche Program Results - PowerStream South												
Program/ Measure	Participants / Units	Unit kW Assumption	Unit kWh Assumption	Equipment Life	Free Ridership	Total Annual Net MW	Fully Effective Annual Net MWh	Program Start Date	Partially Effective Factor	Partially Effective Annual Net MWh (2008)	Source of Input Assumptions	
Residential												
Social Housing												
CFL (11 W)	870	0.00009	28.58	8	1%	0.000	24.616	July 31, 2008	0.2	5.128	2010 OPA Measure List	
CFL (13 W)	12,529	0.0014	44.35	8	1%	0.017	550.105	July 31, 2008	0.2	114.605	2010 OPA Measure List - 15W used as a proxy.	
CFL (23 W)	1,106	0.0016	51.24	8	1%	0.002	56.105	July 31, 2008	0.2	56.105	2010 OPA Measure List	
CFL (27 W)	189	0.0022	71.94	8	1%	0.000	13.461	July 31, 2008	0.2	13.461	2010 OPA Measure List	

* Note - The partially effective factor is based on the timing of first year results. For example, if program began July 31 2008, the savings are assumed to start at the mid point between August 1, 2008 and December 31 2008.

Third Tranche Program Results for 2006 - 2008 - PowerStream Barrie											
Program/Measure	Particip ants / Units	Unit kW Assum ption	Unit kWh Assum ption	Equipm ent Life	Free Ridersh ip	Total Annual Net MW	Fully Effective Annual Net MWh (2007, 2008)	Program Start Date	Partiall y Effectiv e Factor*	Partially Effective Annual Net MWh (2006)	Source of Input Assumptions
Residential											
Consumer Education and Training											
CFL 15 W	11,900	0.00	44.36	8.00	10%	0.015	475.096	Nov 2005	1.0	475.096	2010 OPA Measure List
Research - CFL 15 W	600	0.00	44.36	8.00	10%	0.001	23.954	Feb 2006	0.4	9.981	2010 OPA Measure Lis

* Note - The partially effective factor is based on the timing of first year results. If the program started in 2005, a factor of 1.00 was used for 2006 savings. If program started in 2006, it was assumed that the savings would start at mid point between the remaining months of year. For example, if program began in February 2006, the savings are assumed to start at end of July 2006.

OPA Conservation & Demand Management Programs
 Measure Results

Schedule VECC 3.1a

For: PowerStream Inc.

		VECC # 3 (a)												
#	Initiative Name	Program Year	#	Measure Name	Unit Savings Assumptions			Loss Adjust Free Rider (#1) C	Provincial Total (# Units)	LDC Total (# Units) D	2007 Annual Energy Savings, MWh E=B*C*D/1000	2007 Annual Demand Savings, MW F=A*C*D/1000	2008 Annual Energy Savings, MWh G=E	2008 Annual Demand Savings, MW H=F
					Summer Peak Demand Savings per Unit (kW) A	Annual Energy Savings per Unit (kWh) B	Effective Useful Life (EUL) E							
2007														
10	2007 Every Kilowatt Counts	2007	1	15 W CFL	0.00	43	8	78%	2,376,053	117,910	3,955	0.12	3,955	0.12
10	2007 Every Kilowatt Counts	2007	2	20 W+ CFLs	0.00	62	8	78%	386,799	19,195	930	0.03	930	0.03
10	2007 Every Kilowatt Counts	2007	3	Project Porchlight CFLs	0.00	43	8	76%	500,000	24,812	811	0.02	811	0.02
10	2007 Every Kilowatt Counts	2007	4	Energy Star Ceiling Fan	0.00	90	10	55%	19,166	951	47	0.00	47	0.00
10	2007 Every Kilowatt Counts	2007	5	Furnace Filter	0.01	38	1	55%	77,226	3,832	79	0.02		
10	2007 Every Kilowatt Counts	2007	6	Solar Lights	0.00	33	5	13%	305,048	15,138	65	-	65	-
10	2007 Every Kilowatt Counts	2007	7	Outdoor Motion Sensor	0.00	160	10	55%	30,516	1,514	133	-	133	-
10	2007 Every Kilowatt Counts	2007	8	Dimmer Switch	0.00	24	10	55%	19,390	962	13	0.00	13	0.00
10	2007 Every Kilowatt Counts	2007	9	Energy Star Light Fixtures	0.01	123	16	55%	9,229	458	31	0.00	31	0.00
10	2007 Every Kilowatt Counts	2007	10	SLEDs	0.00	14	5	49%	629,498	31,238	210	-	210	-
10	2007 Every Kilowatt Counts	2007	11	T8	0.00	37	18	77%	18,088	898	26	0.00	26	0.00
10	2007 Every Kilowatt Counts	2007	12	Programmable Thermostat	0.00	75	15	55%	18,633	925	38	-	38	-
10	2007 Every Kilowatt Counts	2007	13	Power Bar with Timer	0.01	72	10	77%	8,442	419	23	0.00	23	0.00
10	2007 Every Kilowatt Counts	2007	14	Lighting Control Devices	0.02	72	10	55%	97,742	4,850	193	0.05	193	0.05
											6,552.450	0.252	6,472.987	0.228
2008														
25	2008 Every Kilowatt Counts Power Savings	2008	1	Air Conditioner/Furnace Filters	0.02	38	1	35%	39,053	1,998			26	0.01
25	2008 Every Kilowatt Counts Power Savings	2008	2	Energy Star® Qualified Compact Fluorescent Floods (n	0.00	89	7	37%	423,741	21,678			712	0.02
25	2008 Every Kilowatt Counts Power Savings	2008	3	Energy Star® Qualified Light Fixtures	0.00	133	16	33%	657,609	33,642			1,499	0.05
25	2008 Every Kilowatt Counts Power Savings	2008	4	Heavy Duty Timers	0.02	301	10	33%	14,885	761			76	0.00
25	2008 Every Kilowatt Counts Power Savings	2008	5	T8 Fluorescent Fixtures	0.00	37	16	33%	119,646	6,121			75	0.00
25	2008 Every Kilowatt Counts Power Savings	2008	6	ENERGY STAR Decorative CFLs	0.00	30	4	39%	1,526,248	78,080			915	0.03
25	2008 Every Kilowatt Counts Power Savings	2008	7	ENERGY STAR Dimmable CFLs	0.00	98	6	38%	98,397	5,034			185	0.01
25	2008 Every Kilowatt Counts Power Savings	2008	8	Power Bars with Timers	0.00	53	10	41%	7,055	361			8	0.00
25	2008 Every Kilowatt Counts Power Savings	2008	9	Programmable Thermostats - Baseboard	0.00	64	15	47%	41,495	2,123			63	-
25	2008 Every Kilowatt Counts Power Savings	2008	10	Car block heater timer	n/a	n/a	n/a	0%	n/a	n/a				
25	2008 Every Kilowatt Counts Power Savings	2008	11	Energy Star® Qualified Compact Fluorescent Light Bul	0.00	53	8	52%	903,439	46,218			1,279	0.05
25	2008 Every Kilowatt Counts Power Savings	2008	12	Lighting Control Devices	0.00	102	10	45%	128,609	6,579			305	0.01
25	2008 Every Kilowatt Counts Power Savings	2008	13	Awnings	0.00	0	n/a	0%	28,376	1,452			-	-
25	2008 Every Kilowatt Counts Power Savings	2008	14	Window Films	0.00	0	n/a	0%	457,649	23,412			-	-
25	2008 Every Kilowatt Counts Power Savings	2008	15	Electric Water Heater Blankets	0.00	0	n/a	0%	14,029	718			-	-
25	2008 Every Kilowatt Counts Power Savings	2008	16	Pipe Wrap	0.00	38	6	47%	842,772	43,114			767	0.06
25	2008 Every Kilowatt Counts Power Savings	2008	17	Low-Flow Toilets	0.00	0	n/a	0%	110,248	5,640			-	-
25	2008 Every Kilowatt Counts Power Savings	2008	18	Keep Cool – Dehumidifier	0.29	500	12	35%	263	13			2	0.00
25	2008 Every Kilowatt Counts Power Savings	2008	19	Keep Cool – Room Air Conditioner	0.14	141	9	42%	295	15			1	0.00
25	2008 Every Kilowatt Counts Power Savings	2008	20	Rewards for Recycling – Dehumidifier	0.29	500	12	44%	7,897	404			89	0.05
25	2008 Every Kilowatt Counts Power Savings	2008	21	Rewards for Recycling – Room Air Conditioner	0.14	141	9	44%	8,535	437			27	0.03
25	2008 Every Kilowatt Counts Power Savings	2008	22	Rewards for Recycling - Halogen Lamp	0.01	275	16	48%	6,808	348			46	0.00
											-	-	6,075.190	0.331

Notes
 1. The savings from 2007 programs in 2008 are calculated in the same way as savings in 2007. The measures with EOL of 1 year (Furnace Filter) are excluded.

VECC IR 3 (b)
Reconciliation to SeeLine Report, Appendix D

Schedule VECC 3.1b

	VECC # 3 (a)				Seeline Report, Appendix C				
	2007 Annual Energy Savings, MWh	2007 Annual Demand Savings, MW	2008 Annual Energy Savings, MWh	2008 Annual Demand Savings, MW	2007		2008		
					Annual energy savings, MWh	Summer peak demand savings, MW	Annual energy savings, MWh	Annual demand savings, MW	
2007 Every Kilowatt Counts	6,552.450	0.252	6,472.987	0.228	6,552	0.25	6,473	0.23	line 10
2008 Every Kilowatt Counts			6,075.190	0.331			6,075	0.33	line 25

Note: The savings amounts in Seeline report Appendix C are rounded

OPA Conservation & Demand Management Programs

Measure Results

For: **Barrie Hydro Distribution Inc.**

			VECC # 3 (a)											
#	Initiative Name	Program Year	#	Measure Name	Unit Savings Assumptions			Net-to-Gross Adjustments (%)	Provincial Total (# Units)	LDC Total (# Units)	2007 Annual Energy Savings, MWh	2007 Annual Demand Savings, MW	2008 Annual Energy Savings, MWh	2008 Annual Demand Savings, MW
					Summer Peak Demand Savings per Unit (kW)	Annual Energy Savings per Unit (kWh)	Effective Useful Life (EUL)							
					A	B		C	D					
2007														
10	2007 Every Kilowatt Counts	2007	1	15 W CFL	0.00	43	8	78%	2,376,053	31,683	1,063	0.03	1,062.63	0.03
10	2007 Every Kilowatt Counts	2007	2	20 W+ CFLs	0.00	62	8	78%	386,799	5,158	250	0.01	249.82	0.01
10	2007 Every Kilowatt Counts	2007	3	Project Porchlight CFLs	0.00	43	8	76%	500,000	6,667	218	0.01	217.88	0.01
10	2007 Every Kilowatt Counts	2007	4	Energy Star Ceiling Fan	0.00	90	10	55%	19,166	256	13	0.00	12.62	0.00
10	2007 Every Kilowatt Counts	2007	5	Furnace Filter	0.01	38	1	55%	77,226	1,030	21	0.01	-	-
10	2007 Every Kilowatt Counts	2007	6	Solar Lights	0.00	33	5	13%	305,048	4,068	17	-	17.34	-
10	2007 Every Kilowatt Counts	2007	7	Outdoor Motion Sensor	0.00	160	10	55%	30,516	407	36	-	35.76	-
10	2007 Every Kilowatt Counts	2007	8	Dimmer Switch	0.00	24	10	55%	19,390	259	3	0.00	3.37	0.00
10	2007 Every Kilowatt Counts	2007	9	Energy Star Light Fixtures	0.01	123	16	55%	9,229	123	8	0.00	8.32	0.00
10	2007 Every Kilowatt Counts	2007	10	SLEDs	0.00	14	5	49%	629,498	8,394	56	-	56.35	-
10	2007 Every Kilowatt Counts	2007	11	T8	0.00	37	18	77%	18,088	241	7	0.00	6.91	0.00
10	2007 Every Kilowatt Counts	2007	12	Programmable Thermostat	0.00	75	15	55%	18,633	248	10	-	10.26	-
10	2007 Every Kilowatt Counts	2007	13	Power Bar with Timer	0.01	72	10	77%	8,442	113	6	0.00	6.28	0.00
10	2007 Every Kilowatt Counts	2007	14	Lighting Control Devices	0.02	72	10	55%	97,742	1,303	52	0.01	51.75	0.01
											1,760.653	0.068	1,739.301	0.061
2008														
25	2008 Every Kilowatt Counts Power Savings Event	2008	1	Air Conditioner/Furnace Filters	0.02	38	1	35%	39,053	526			6.96	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	2	Energy Star® Qualified Compact Fluorescent Floods (L	0.00	88	7	37%	423,741	5,708			187.38	0.01
25	2008 Every Kilowatt Counts Power Savings Event	2008	3	Energy Star® Qualified Light Fixtures	0.00	133	16	33%	657,609	8,858			394.60	0.01
25	2008 Every Kilowatt Counts Power Savings Event	2008	4	Heavy Duty Timers	0.02	301	10	33%	14,885	200			20.09	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	5	T8 Fluorescent Fixtures	0.00	37	16	33%	119,646	1,612			19.69	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	6	ENERGY STAR Decorative CFLs	0.00	30	4	39%	1,526,248	20,559			240.86	0.01
25	2008 Every Kilowatt Counts Power Savings Event	2008	7	ENERGY STAR Dimmable CFLs	0.00	98	6	38%	98,397	1,325			48.83	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	8	Power Bars with Timers	0.00	53	10	41%	7,055	95			2.06	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	9	Programmable Thermostats - Baseboard	0.00	64	15	47%	41,495	559			16.55	-
25	2008 Every Kilowatt Counts Power Savings Event	2008	10	Car block heater timer	n/a	n/a	n/a	0%	n/a	n/a			-	-
25	2008 Every Kilowatt Counts Power Savings Event	2008	11	Energy Star® Qualified Compact Fluorescent Light Bul	0.00	53	8	52%	903,439	12,169			336.78	0.01
25	2008 Every Kilowatt Counts Power Savings Event	2008	12	Lighting Control Devices	0.00	102	10	45%	128,609	1,732			80.34	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	13	Awnings	0.00	0	n/a	0%	28,376	382			-	-
25	2008 Every Kilowatt Counts Power Savings Event	2008	14	Window Films	0.00	0	n/a	0%	457,649	6,165			-	-
25	2008 Every Kilowatt Counts Power Savings Event	2008	15	Electric Water Heater Blankets	0.00	0	n/a	0%	14,029	189			-	-
25	2008 Every Kilowatt Counts Power Savings Event	2008	16	Pipe Wrap	0.00	38	6	47%	842,772	11,352			201.99	0.02
25	2008 Every Kilowatt Counts Power Savings Event	2008	17	Low-Flow Toilets	0.00	0	n/a	0%	110,248	1,485			-	-
25	2008 Every Kilowatt Counts Power Savings Event	2008	18	Keep Cool - Dehumidifier	0.29	500	12	35%	263	4			0.62	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	19	Keep Cool - Room Air Conditioner	0.14	141	9	42%	295	4			0.23	0.00
25	2008 Every Kilowatt Counts Power Savings Event	2008	20	Rewards for Recycling - Dehumidifier	0.29	500	12	44%	7,897	106			23.39	0.01
25	2008 Every Kilowatt Counts Power Savings Event	2008	21	Rewards for Recycling - Room Air Conditioner	0.14	141	9	44%	8,535	115			7.12	0.01
25	2008 Every Kilowatt Counts Power Savings Event	2008	22	Rewards for Recycling - Halogen Lamp	0.01	275	16	48%	6,808	92			12.11	0.00
											-	-	1,599.613	0.087

Notes
 1. The savings from 2007 programs in 2008 are calculated in the same way as savings in 2007. The measures with EOL of 1 year (Furnace Filter) are excluded.

VECC IR 3 (b)
Reconciliation to SeeLine Report, Appendix D

Schedule VECC 3.2b

	VECC # 3 (a)				Seeline Report, Appendix D				
	2007 Annual Energy Savings, MWh	2007 Annual Demand Savings, MW	2008 Annual Energy Savings, MWh	2008 Annual Demand Savings, MW	2007		2008		
					Annual energy savings, MWh	Summer peak demand savings, MW	Annual energy savings, MWh	Annual demand savings, MW	
2007 Every Kilowatt Counts	1,760.653	0.068	1,739.301	0.061	1761	0.07	1739	0.06	line 10
2008 Every Kilowatt Counts			1,599.613	0.087			1600	0.09	line 25

1. The savings amounts in Seeline report Appendix D are rounded

PowerStream South

	VECC 3 (a), Sch. 3.1				Seeline report & Managers Summary				LRAM calculation (Schedule 3 of Application)						
	2007		2008		2007		2008		2007			2008			
	MW	MWh	MW	MWh	total Net MW	Total Net MWH	total Net MW	Total Net MWH	Total net MWh	Residential rate, \$/kwh	LRAM	Total net MWh	Residential rate, \$/kwh	LRAM	
EKC 2007	0.252	6,552.450	0.228	6,472.987	0.2520	6,552.450	0.228	6,472.987	<i>SeeLine report, p.16</i>	6,552.450	\$ 0.0128	\$ 83,871	6,472.987	\$ 0.0129	\$ 83,502
EKC 2008			0.331	6,075.190			0.331	6,075.190	<i>SeeLine report, p.17</i>				6,075.190	\$ 0.0129	\$ 78,370

PowerStream North

	VECC 3 (a), Sch. 3.1				Seeline report & Managers Summary				LRAM calculation (Schedule 3 of Application)						
	2007		2008		2007		2008		2007			2008			
	MW	MWh	MW	MWh	total Net MW	Total Net MWH	total Net MW	Total Net MWH	Total net MWh	Residential rate, \$/kwh	LRAM	Total net MWh	Residential rate, \$/kwh	LRAM	
EKC 2007	0.068	1,760.653	0.061	1,739.301	0.0680	1,760.653	0.061	1,739.301	<i>SeeLine report, p.11</i>	1,760.653	\$ 0.0129	\$ 22,712	1,739.301	\$ 0.0135	\$ 23,481
EKC 2008			0.087	1,599.613			0.087	1,599.613	<i>SeeLine report, p.11</i>				1,599.613	\$ 0.0135	\$ 21,595